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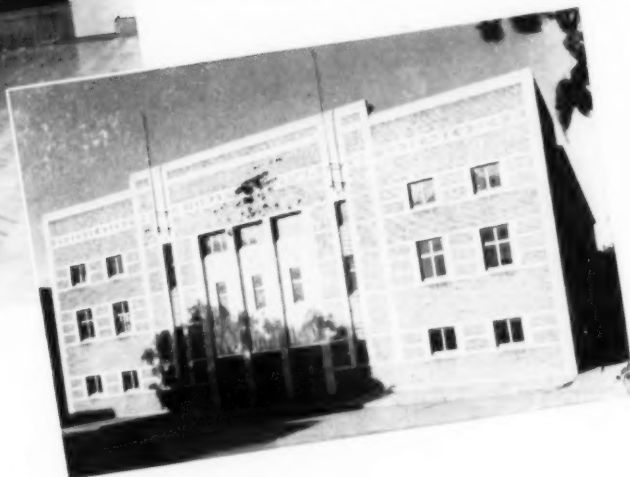
Equipment and Supplies for Small Schools

Edgar L. Morphet

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SCHOOL BOARDS AND SUMMER SEASON

The school premises are deserted. The vacation season is on. No pupils, no teachers. No footsteps in the corridors and stairways. No noise, no happy chatter and laughter. Silence reigns in the tightly closed, stuffy classrooms.

But somebody must be on the job. The janitor is there. The repairmen, too, are on the scene. They tinker, they hammer, they clean. The whole school plant must be rehabilitated. Heating and ventilating apparatus needs cleaning and overhauling. Fresh coats of paint are applied here and there. The floors must be cleaned and refinished. Woodwork and furniture must be scrubbed and retouched. Doors and exits must be fixed to respond readily. The fire escapes, if any, must be looked after. Outside repairs are made, and walks and play areas are resurfaced. Cleanliness, safety, and good order are the watchwords.

So much for the school plant. The administration office is by no means idle. Supplies and equipment, books and school paraphernalia which have been planned for in the spring, are purchased and installed for the fall opening. Vacancies in the teaching staff are filled; last-minute changes are made in programs and courses. When pupils and teachers return to their classrooms, the full drive of work must get under way without a day's delay.

The school administrator may take a day off to go fishing, he may visit one or the other of the two World's Fairs — New York or San Francisco — but he knows that there is a big summer's job which must be done.

The schools must go on!

THE EDITOR

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Volume 99, No. 1

JULY, 1939

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WHERE DO YOU DO YOUR MARKETING?

Constant Promotion Policy Reduces School Costs

W. E. Rosenstengel¹

Charles S. Turner²

The lean years of the depression have caused the administrators to look for every possible avenue for economy in the school expenditures without injury to the educational program. The instructional cost is the greatest item of any school budget. This item usually amounts to about 70 per cent of the budget. In a growing community, the salary for additional teachers becomes a burden as the income does not increase proportionally to the needed expenditures.

For some years past the administrators in Columbia were faced with the problem of increased enrollment and decreased resources. It was thought best to look toward the promotion policy of the school for bettering the situation.

Many arguments have been advanced, both pro and con, concerning the policy of maintaining a normal rate of progress through the schools by practically all pupils. Many teachers feel that so long as a child is not up to the standard for a grade he should be retained in the grade until he reaches or at least approximates the standard. They argue that if a child cannot reach the standard for one grade, there is little hope for him to have any measure of success in the next. This is undoubtedly true in a school where every pupil is expected to do the same thing in the same way.

Proponents of a constant promotion policy answer this argument by saying that the slow pupil will profit more by staying with his social group and interests, even though it is not possible for him to master the subject matter of a grade with a degree of thoroughness that will enable him to meet the standard for the grade. School cannot be a very happy place for these slower pupils if they are forced to stay behind when their friends and playmates pass to a higher grade. Naturally, they become discouraged, adopt a "don't care" attitude, and often become discipline problems.

From an administrative standpoint, a strong argument in favor of a constant promotion policy is decreased school costs. Pupils who are retained add to the enrollment of the school and thus to the cost. This is hard for some teachers and laymen to see as they maintain that one additional pupil in a room adds very little to the expense necessary for operation. That is true for one pupil in one room, but when a school system as a whole is analyzed, the effect of nonpromotions is astonishing.

In 1932, the Columbia public schools abandoned the policy of retaining pupils

simply because they were not up to the standard for their grade. The present policy is to move the pupils through the grades at the normal rate, making exceptions only when it is apparent that an individual pupil would really profit by repeating the grade. Each teacher is to take the pupils she receives where she finds them and proceed from there.

When this policy was inaugurated in 1932, the enrollment in the elementary white schools was 1,327. In 1938, the enrollment in these six grades was 1,227. This seems remarkable when it is considered that the population of Columbia has increased approximately 5,000 during these years.

The reason for this decrease in elementary-school population is revealed through a comparison of the age grade reports for 1932 and 1938. In 1932, only 68.9 per cent of the 1,327 elementary pupils enrolled were of normal age for their grade. In 1938, 85 per cent of the 1,227 pupils were of normal age. Thus, while the total elementary-school enrollment has decreased,

in school constituted only 68.9 per cent of the total enrollment as it did in 1932, the total population of the elementary school would now be 1,504 pupils, or an increase of 277 over the present population.

Such an enrollment of 1,504 would create several critical problems. The buildings would have to be enlarged or new plants constructed to care for the pupils; textbooks and supplies would be necessary for the additional 277 pupils.

The present teacher-pupil ratio is 1 to 31.5. To maintain this ratio with 1,504 pupils, it would be necessary to employ 48 full-time elementary teachers or 9 more than are employed at the present time. As the average annual salary of elementary teachers is \$1,075, this would mean an additional cost of \$9,675 per year for teachers' salaries alone. If the enrollment were increased without adding to the teaching staff, the teacher-pupil ratio would become 1 to 38.6.

The worth of such a policy must, in the last analysis, be judged not only in terms of decreased cost to the taxpayers, but also in terms of the quality of the educational output of the schools. Judged on the basis of results of standardized tests, the average rank today is higher than in 1932, even though many pupils are not retained in school as long as they formerly were. The following table gives a comparison of the number of pupils under age, number normal age, number over age, and median

Comparison of Ages of Elementary Pupils, 1932 and 1938

Grade	Under Age		Normal Age		Over Age		Median Grade Placement	
	1932	1938	1932	1938	1932	1938	1932	1938
1	0	0	204	196	39	9	1.8	2.2
2	18	6	145	180	56	15	2.9	3.1
3	21	16	151	175	54	16	4.1	4.0
4	21	8	160	171	59	22	4.7	4.9
5	16	12	126	148	50	28	5.7	5.9
6	20	21	192	166	58	38	6.6	6.8
Total	96	63	915	1,036	316	128		

the enrollment of pupils of normal age has increased from 915 to 1,036.

If the 1,036 pupils of normal age now

grade rank for each grade in the five white elementary schools for the years 1932 and 1938.

This table reveals that there were 33 more pupils under age in 1932 than in 1938. This is probably due to the present ruling of prohibiting children to enter school who are less than 5 years 9 months old at the beginning of the school term. There were 188 more children over age in 1932 than in 1938. This is an average of 31.3 pupils, or one room, per grade. The median grade placement, measured in both cases by the Stanford Achievement Tests (except in grade one where the Gates Primary Reading Tests were used) shows that the pupils are, on the whole, more advanced than in 1932. It is realized that the promotion policy is only a very small factor in producing results on achievement tests. These figures are only offered as evidence that the educational status of the pupils has not deteriorated under the policy of maintaining a normal rate of progress through the schools by practically all pupils.

THE NEW DISCIPLINE

Mental discipline, provided for earlier in the rigid requirements of Latin, Greek, and mathematics, is sought today in independent study plans designed to stimulate and to test the intellectual powers of the student, his ability to reason, to evaluate, to draw conclusions from the facts in hand. It is recognized that encyclopedic knowledge or the acquisition of much detailed information is not the end of education. The ability to view facts in their proper perspective, to utilize them in forming judgments, and to keep an open mind ready to admit new evidence, is the more significant purpose of the educative process. A new emphasis on the importance of teaching youth to think is evident in many widely differing experiments and plans. It does not mean that the mastery of facts is no longer required. Nothing will insure more thorough mastery than the method of teaching which emphasizes the importance of reasoning and accurate deductions. — Dr. Oliver C. Carmichael.

¹Superintendent of Schools, Columbia, Mo.

²Assistant Superintendent of Schools, Columbia, Mo.

Equipment and Supplies for Small Schools¹

Edgar L. Morphet²

The problem of equipping the small school is unique only in certain respects. There are many fundamental principles well recognized in the fields of equipment and supply management which apply just as completely to small schools as to large schools. However, there are certain problems and procedures which must necessarily be somewhat different from those involving large schools and attention here will tend to be centered on those.

While this discussion is intended to apply mainly to equipment, as suggested in the title, many of the principles and procedures will apply equally well to supply management. After all, the fields are so closely interrelated that for practical purpose most of the principles need not be separated.

At certain stages of the discussion it will be necessary to distinguish between procedures which would be used for a small school which is located in a small independent district and those which would be used for a small school which is located in a large administrative unit such as the county. In the first case, any economies and standardization of purchases which could be effected by large-scale purchases would have to be worked out cooperatively among small districts. While such co-operative procedures are always possible, they are usually difficult to achieve or maintain in practice. In the case of a small school in a large administrative unit, such economies and standardization within limits should be achieved by the administrative officials of the unit rather than by the person in charge of the particular school. The cooperation in this case would be between the principal of the school and the officials of the county or other administrative unit rather than through the voluntary cooperation of the small independent units.

The person in charge of a small school has many problems connected with the purchase either of equipment or supplies that are peculiar to the fact that he represents a small school. In a large school system the staff can include at least one specialist who can devote much of his time and effort to a study of equipment and equipment needs. In the small school, the principal or superintendent will have to make most of the studies and, after such studies are completed will be in a less favorable position to make satisfactory purchases than will the superintendent of a large school system.

The purchase of equipment, represents a very important and strategic step in connection with the development of the edu-

cational program in any school. Just as a building may facilitate or handicap seriously development of a satisfactory program, so may the equipment.

All equipment purchases, therefore, should be based on carefully formulated plans rather than on the persuasive sales talk of some suave equipment salesman. Such plans cannot be satisfactorily formulated overnight but should be in process of continuous development.

The discussion which follows is based on two major assumptions ordinarily accepted in theory but not always observed in practice: (1) Any equipment which is purchased should be well adapted to meet the educational needs which will develop in connection with the school program. (2) The equipment best adapted to meet these needs should be purchased at the most economical price practicable.

If equipment is to be adapted to the educational needs, there must be some plan for assuring that that adaptation will not come merely because a piece of equipment is purchased and assigned to certain uses. If this criterion is to be met satisfactorily, the entire educational program must be carefully formulated and developed and the equipment needs including needs for equipment that may be purchased at some future date listed in detail. The development of such a program and the determination of equipment needs implies and requires careful cooperation. These needs cannot be determined by the superintendent alone. If the school is large enough to have a business manager, they certainly cannot be determined by the business manager alone. The superintendent should consult with principals, teachers, and others who are likely to be involved in carrying out the program and in using the equipment. Their wishes should be given full consideration and, insofar as practicable, incorporated in the proposals. The ideas of the business manager are important because he undoubtedly can make suggestions which will result in economies. However, they should not prevail because the educational needs are just as important as economy.

Great care is necessary in all schools but particular precautions should be observed in a small school to guard against equipment of the faddist type. Money invested in such equipment may handicap the school and its educational program for many years to come. All of us have seen equipment of a faddist type which may have been purchased on the basis of the claims of some firm which has certain types of equipment to sell or on the theories of some impractical schoolman. Often such equipment is used a few years and then either discarded, sold at a considerable loss, or retained as a great

handicap. These observations call attention to an important criterion that is particularly applicable to the small school. In view of the fact that some equipment in smaller schools has only limited usage at best, most equipment should be adapted to more than one use unless such adaptation detracts seriously from the value and usability of the equipment. For example, it is, of course, possible to buy tables and desks that can be used only for chemistry, and to buy others that are well adapted for use for physics but that could not readily be used for chemistry or other purposes. In a large school specialized equipment would probably be desirable because its use for the specialized purpose intended might approach 100 per cent. In a small school a desk adapted only for chemistry might be used only one period during the day, while desks which might be adapted, without great sacrifice to the educational value, to physics, chemistry, and to general science would certainly have far greater usage. All equipment, of course, should meet the commonly accepted criteria of comfort, sanitation, attractiveness, and reasonable economy as well as adaptability of purpose.

Now suppose we examine further the second assumption, stated above, to the effect that the best equipment to meet the needs should be obtained at the lowest price practicable. In practice, that assumption probably is ignored about as often as it is observed. Most states still do not require specification and many states do not require equipment to be purchased on the basis of bids. There are many small communities scattered throughout the United States where the board of education and perhaps the superintendent still believe that regardless of price it is good policy to do all purchasing possible through local concerns. If a teacher's desk is needed, the board may call in some local furniture dealer who has not had much school business recently or who is a particular favorite of the board and ask him to bring some catalogs. They may then go through those catalogs, decide upon the desk they think they want, and ask him to order it at the price he names. Again and again the price paid for equipment bought in this manner is found to be from 30 to 50 or even 100 per cent more than the price at which such equipment could have been purchased had other procedures been used.

If this assumption is to be observed, equipment will, in the first place, probably be bought on the basis of specifications rather than in terms of some particular trade name or on the basis of a picture which seems to represent about what is wanted. In the second place, equipment will be purchased on the basis of bids.

¹An address before a Discussion Group, American Association of School Administrators, Cleveland, Ohio, February 27, 1939.

²Director of Administration and Finance, Florida State Department of Public Instruction.

Local dealers may even be allowed a small differential of 2 to 5 per cent, but they will certainly not be permitted to name their own price and to sell the equipment without regard to prices obtainable elsewhere. In the third place, it is obvious that boards will not purchase the lowest priced equipment offered as a false move intended to promote economy, but will purchase in terms of the best buy available in accordance with prescribed specifications.

Purchase on the Basis of Specifications

During recent years there has been an increasing tendency to purchase both equipment and supplies in terms of specifications. More progress has probably been made toward purchasing on the basis of specifications in the supply field than in the equipment field. This is probably due to the fact that supplies are purchased more frequently than equipment, that there has been a greater variety of supplies and that the preparation of the specifications for supplies is ordinarily easier than the preparation of specifications for equipment.

The time is rapidly coming when practically all purchases, even in the equipment field, will be based on specifications. Purchases made from a concern which is presumed to have satisfactory equipment in the field involved or made on the basis of samples or pictures or of other information have, of course, frequently been satisfactory. However, in all too many cases they have not been satisfactory. This leads to misunderstandings which, in turn, are tending to lead both producers and consumers to insist more and more upon specifications.

A specification is frequently thought of as the common meeting ground for the producer, the distributor, and the consumer. In the field of school equipment, it is the statement of what school authorities need and what the producer will be required to supply. A proper specification, therefore, is one which will enable bidders to know exactly what the school board desires or requires and what procedure the board will follow to satisfy itself that the specification has been met.

While purchase on the basis of specifications is desirable for small schools as well as large, it might just as well be recognized that again the small school faces a particularly difficult problem if it is to attempt to make purchases on that basis. In the first place, the head of a small school cannot be expected to have the technical knowledge to prepare specifications or to have the time to prepare such specifications for many types of equipment. These difficulties, although they must be recognized, are not unsurmountable. Later in this paper attention is directed to proposals and procedures whereby heads of small schools may have access to specifications and may have the advantages of purchases based on such specifications.

While a good specification will comprise

a complete description and specific standards for any type of equipment or supply which is to be purchased and is, as indicated, difficult to prepare, there are certain general conditions of purchase which should be stated in specifications and which can readily be included by any schoolman aware of his needs. However, even some of the larger city school systems are still overlooking some of these conditions as indicated by a recent study by the National Association of School Business Officials.

Some of the general conditions of purchase which should be stated include the following: the point or points of delivery; the time of delivery; the terms and conditions of payment; the guarantees which are required to accompany the bid; whether or not a differential is to be allowed local or intrastate bidders, and if so the amount of the differential; whether or not the board wishes to retain the option of purchasing additional units at the same price within a specified time and how many units; whether or not samples are required for all equipment or are to be required only in the case of substitutes if at all; whether bids on substitutes are permitted; the date and place for filing bids; the date for opening bids and awarding contracts; and the bond which will be required in case of failure to fulfill the contract.

Attention was invited above to the fact that the preparation of satisfactory specifications is difficult and can probably not be undertaken extensively and satisfactorily by the average person in charge of the small school. Perhaps that may have its advantages. If each person interested in purchasing equipment were to attempt to prepare specifications for the equipment in which he is interested, those specifications would probably differ materially and would result in extra complications and expense for the manufacturer. Specifications, therefore, should generally be standardized rather than individualized. Since undue variations in specifications in a given field result in extra expense to manufacturers who attempt to meet those specifications, standardized specifications will ultimately mean an advantage to the purchaser in the form of a lower price for the equipment purchased.

Fortunately, there are several possibilities that the local schoolman may take advantage of in connection with the preparation of specifications. In the first place, during recent years the Federal Government has made substantial progress in connection with the preparation of specifications both in the supply and in the equipment field. While these specifications are not directly concerned with school supplies and equipment, nevertheless many specifications are included which apply directly to matters of interest to the schools. Those who are interested in federal specifications may obtain a complete index upon application accompanied by money order or cash to the Superintendent of Documents, Government Printing Office, Wash-

ington, D. C., for 15 cents a copy. Among the federal specifications which should be of interest to school people are those relating to fire extinguishers, furniture, hardware, linoleum, office supplies, paints, pigments, varnishes, pipes, pipe fittings, plumbing fixtures, tubes and tubing, shades and shade cloth, and tools.

A number of the larger city school systems in particular have, for a number of years been utilizing these specifications and have gone through and selected those which are applicable to school equipment. Many of these specifications are discussed in bulletins of the National Association of School Business Officials, such as Bulletin No. 6 published in 1938 which deals with "School Supplies, Selection, and Storage in Small Cities and the Use of Specifications in Purchasing School Supplies and Equipment."

Copies of specifications used by such school systems may frequently be obtained by writing the superintendent or business manager.

Determining Whether Equipment Meets Specifications

The problem of securing adequate specifications presents difficulties, but even greater difficulties may be encountered by small school systems in attempting to determine whether the equipment furnished meets the specifications prescribed. That is difficult enough in the field of supplies, but in the field of equipment the difficulties are even greater. No small school system can expect to set up a testing plan to determine whether or not specifications are being met. Recently, however, there has been a very promising development in this field. Again the Federal Government has taken the initiative and has developed what is known as the certification plan which is prepared by the Division of Codes and Specifications of the U. S. Bureau of Standards. This certification plan is essentially simple. It consists in the compilation and distribution by the Bureau of Standards of lists and sources of supply of commodities covered by certain selected federal specifications and commercial standards. These lists contain the list of firms which have indicated their willingness to certify to purchasers upon request at the time of placing the contract that the material provided by them on contract based on the selected specifications and standards does actually comply with the requirements and tests thereof and is so guaranteed by them. Such lists or sources of supply for approximately six hundred federal specifications and commercial standards have already been prepared and are designated as Letter Circular LC 256a (in twelve parts). Their distribution is limited to tax-supported purchasing agencies, federal, state, county, and municipal. Individual lists will be sent upon specific request. Misrepresentation in connection with the certification plan is, according to the Federal Government, the equivalent of "obtaining money under false pretenses."

Therefore, so far it seems to be fairly effective.

Again the small schoolman is confronted with difficulties. If he has to comb through this extensive list of federal specifications and of sources of supply, considerable study and much time will be needed. There is here a fertile field for cooperative effort which will be discussed in the following.

Cooperative Procedures

As indicated or implied through this report, the head of a small school is greatly handicapped when it comes to taking any of these steps in connection with either the equipment or the supply field. Either the head of a small school will have to pay the higher price necessitated by the fact that he is connected with a small school and cannot make some of the studies that should be made by larger school systems, or he will have to take some definite and drastic steps to overcome these problems. This is sufficiently important to warrant the most careful attention and thinking of persons connected with small school systems throughout the country. Usually each small school system tends to go its own way and pay its own price particularly until taxpayers begin to object and the school people are forced to take drastic steps. There have been a few instances, however, where small school systems have learned the advantages of cooperation and have set up definite plans for cooperation. Some of the possibilities in this field are as follows:

1. A number of small schools may cooperate in the selection of federal specifications which are applicable, in adapting specifications used by larger school systems, or in preparing specifications to meet their needs.

2. Better still the state department of education could and probably should take the initiative in helping small schools and school systems to cooperate in this field. The state department of education might select specifications from among those already prepared and prepare additional specifications particularly adapted to meet the needs of small schools. States could then exchange ideas with the result that specifications for each common type of equipment would soon be available and that such specifications would be standardized. That does not at all mean that each type of school would have to purchase the same type of equipment. There should be specifications for many types of equipment and the specifications for each type should be standardized.

As an example of what may be accomplished in this field may be cited some of the work of the school-plant-planning service of the Alabama State Department of Education. Recently the school-plant-planning service in that state has prepared specifications for material and labor required in the erection of small school buildings in that state. These specifications while not satisfactory in all respects and while still in need of further refinement do

serve the purpose of establishing minimum standards and effecting economies that would not otherwise be effected. Such specifications have also been developed for finishing hardware, for plumbing, for jacketed heaters, which are very satisfactorily used in many of the small buildings particularly in the southern part of the state, for electrical work, for blackboards and corkboards, and for several other types of equipment. I see no reason at all why these might not be extended to include specifications for all types of equipment commonly used in the small schools.

The Virginia State Department of Education has prepared some excellent specifications for lockers, teachers' desks and chairs, library tables, pupils' desks, etc. These are suitable for use in the schools of any state and set a pattern that might well be followed by other state departments.

3. There are still other possibilities, of course, along this same line. Recently the National Association of Public School Business Officials has indicated that it is in a position to initiate and carry through a program which will bring about the development of specifications to meet the needs of their schools and which will make the use of specifications much simpler and more effective. The state departments and the National Association of Public School Business Officials could readily cooperate in a project for small schools and bring about major improvements in the field of specifications and specification purchasing.

The state department or the state department in cooperation with the National Association of Public School Business Officials could thus develop code books of specifications for school supplies and equipment which every manufacturer and dealer might secure. Thus, when the school officials order materials or equipment they would need only to state the code number of the article and the quantity. They would not have to bother with sending out specifications. Every dealer quoting on supplies or equipment would have an equal chance and would know exactly what is wanted.

4. The state department might also take the initiative in preparing and adapting from the federal list of manufacturers who are willing to certify equipment in the various fields a list of manufacturers of school equipment who are willing to certify that their products meet prescribed standards. These lists could then be made available to local school officials and used as a basis for calling for bids.

To supplement the federal certification plan, the state might well also develop a certification plan of its own which could be used very effectively. Manufacturers who fail to live up to the requirements of their certification as shown by tests could readily be dropped from the list. Some states have already made a substantial beginning in this respect.

5. Testing materials to see that they

conform to specification will, to some extent, be necessary even with the willing-to-certify list. Even large school systems cannot carry on many of the tests that would be involved because of the expensiveness of the equipment required and of the time required. Fortunately the testing and experimental facilities of the United States Bureau of Standards are available. However, small school systems again cannot individually expect to stand the expense of having tests made by the Bureau of Standards. One of the most effective solutions, once more, would be for the state department to take the initiative to carry on continued studies of equipment and supplies and work out plans for having some of the tests made in state chemical or other laboratories or in state university laboratories and, from time to time, have the Bureau of Standards make tests of equipment or supplies which may be desirable to aid in providing better specifications or in making a better check of the extent to which specifications are being met in the various fields.

6. If cooperative plans can be worked out as indicated previously, I do not see why the state department of education might not act as an intermediary to make possible a plan of cooperative purchase of equipment or supplies on a state-wide basis. No school system would be required to purchase a given type or unit of equipment but would be permitted to indicate the type desired. Local school units might transmit their orders directly and get the advantage of some reduction in price but would probably get even a better price if the state could act as the intermediary to assemble and transmit orders. This would not necessarily work advantageously for types of equipment which have to be secured within a brief time, but it would work for other types. For example, this year Florida decided after careful study to require that all school buses be equipped with a manually operated stop signal. County superintendents cooperated with the state department in developing specifications. At the suggestion of county superintendents, the state department then called for bids and found that stop signs meeting the specifications could be provided at a cost of \$2.75 each if ordered through the state and would cost \$5 each if ordered individually. Every county took advantage of the offer; the state department merely assembled and transmitted orders, and thus the counties were saved a substantial amount.

Standards, Lists of Equipment

In connection with this discussion it might be possible and perhaps advantageous to attempt to suggest standards and lists of equipment of various types that might be purchased by small schools or school systems. However, those who are seriously interested in purchasing equipment will undoubtedly want to explore

(Concluded on page 92)

The Cleveland School Lunchrooms

Mary Hemmersbaugh¹

The organization of the Cleveland public-school lunchrooms is built around a very simple clear-cut core: Cleveland's lunchrooms are for the *benefit of the students*. We want to give the children nutritious, palatable, attractive food, in ample quantity at low cost. They need it. There are too many cases of malnutrition among students, both in well-to-do and poor families. For any appreciable number of the students to be able to afford the food, it must be kept at low selling prices. Efficient business methods effect good values. We must be constantly "on our toes" to do a good job. Every procedure adopted must have behind it the urgency of doing a good job. So our fundamental purpose shapes our course.

Organization of the Lunchrooms

The Cleveland public-school lunchrooms are operated under board-of-education control. The same policies and procedures are effective throughout the city. Purchasing, employment, bookkeeping, and other necessary records are centralized. Standard recipes are used and standard portions are for sale at the same prices in the various school buildings.

Self-Supporting Department. The Cleveland board of education lunchrooms aim to operate without either profit or loss. The Division of Lunchrooms pays for the following out of receipts: replacement and repair of, and additional, large equipment; original purchase and replacement of utensils; uniforms for employees and laundering of them; pension contributions for all personnel of the department, under the State Retirement Systems; all salaries; all food, cleaning and office supplies; and mileage. It is a self-supporting department

¹Supervisor, Division of Lunchrooms, Cleveland, Ohio.

with definite educational objectives. Just a rather large business trying to do things in a systematic way. A few underlying principles guide decisions and details, so that the executives in charge try to be impersonal and fair in dealing with specific situations.

Setup at Headquarters. The Division of Lunchrooms belongs in the educational department of the school system and is under the administration of the Directing Supervisor of Industrial Arts. There is a supervisor immediately responsible for the lunchrooms. At the central office the clerical staff consists of five full-time employees and a sixth who is employed the first fifteen days of each month. There is a buyer delegated from the Business Department who also takes the dictation of the supervisor; the bookkeeper, delegated from the clerk-treasurer's department, who is also the employment agent for the Division of Lunchrooms; a clerk who figures the costs of recipes and menus and assists with the bookkeeping; a clerk who checks all delivery slips, invoices, and credit slips, and does all filing; a typist, and a temporary junior clerk. The work of this office staff is closely interrelated.

School Lunchrooms. There are 37 lunchrooms in the Cleveland school system. They are in the 13 senior high schools, 17 junior high schools, and the following special schools: 4 open-air centers, the school for crippled children, the school for deaf children, and the special school for boys.

In the schools there are 22 managers, some managers having more than one school, one dietitian besides manager in charge at testing kitchen, 3 assistant managers, and 290 employees under the various classifications of: first cook, assistant cook,

pastry cook, assistant pastry cook, counter worker, cashier and checker, salad and sandwich maker, porter, miscellaneous worker.

Services Offered by Division of Lunchrooms

1. **Convenient Daily Lunch.** In the junior and senior high schools a convenient everyday food service is offered to all students, teachers, and other board-of-education employees. A student may buy his entire lunch at school or he may supplement a lunch from home, preferably with milk, fresh fruit, vegetables, or one of the other inexpensive hot foods.

2. **Opportunity for Good Nutrition in Practice.** By providing the opportunity for practice of good food habits, the lunchroom offers long-range training to *all students in the schools* in desirable eating habits and the selection of proper food. The lunchroom manager has the possibility of reaching all the students in a school and, indirectly, the community which the school serves. The importance of applying the facts of good nutrition to the daily school lunch is increasingly recognized. The lunchroom is as it should be, one important means of health education. The students need what their lunchroom can contribute toward their good health. Aside from the practical necessary daily food service, the lunchroom's really great service is in aiding the establishment of good food habits.

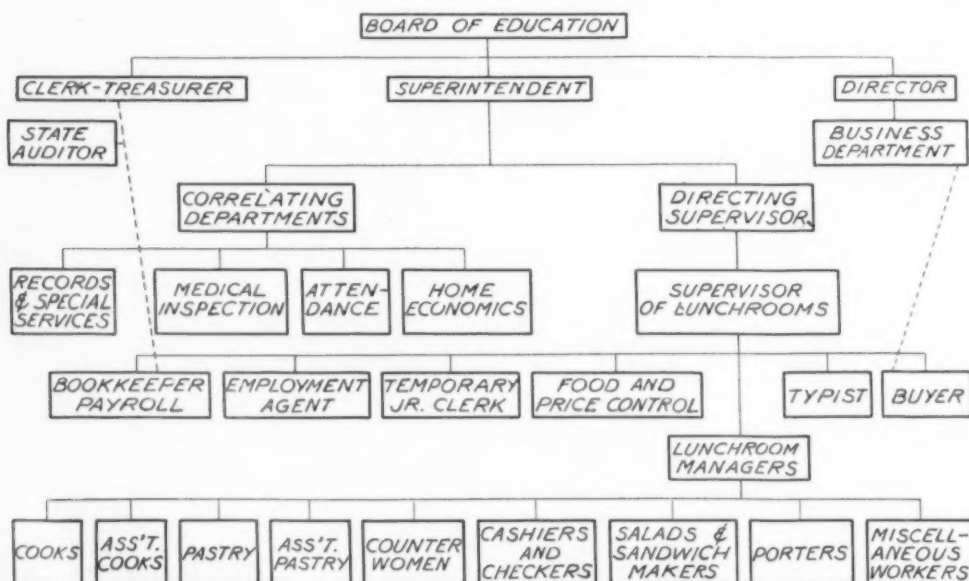
Palatable, attractive food, temptingly displayed is the best means of stimulating good lunch selection.

3. **Functions in Educational Program.** Besides its role in the health program of a school, a lunchroom contributes in other ways to the general educational program. The lunchroom may be a means of training students for future living by giving them practice in desirable living now. Training may be given in citizenship, including consideration of others and of public property, personal conduct, and practical everyday economics.

The lunchroom may help pupils to formulate and practice standards of good behavior. The lunch periods are scheduled every 30 minutes so that lines are not too crowded and students come in relays. This is more natural.

The lunchroom is used as a vehicle by which the classroom teachings of other departments are made effective in everyday living. In those schools where the principal, the faculty, the school doctor, and the nurse use the lunchroom as an effective means of education, the students benefit more fully. The lunchroom has definite educational objectives. It should function in the general educational program of the school.

4. **Agency for Feeding Children of Indigent Families.** The lunchroom is the agency by which lunches are provided to



The cafeterias of the Cleveland school system are organized for a direct flow of authority from the board of education through the superintendent's office, the office of the supervisor of industrial arts, and the supervisor of lunchrooms.

the children of indigent families. All cases are investigated by the Bureau of Attendance. The children entitled to these lunches are served the "Budget Special" lunch which is a well-balanced meal. These are called "school aid lunches," and are available also to students who pay for them.

Because of the great need of these children, special care is taken to offer good food values on these tray specials. From a nutritive standpoint as well as from a price standpoint, these are our biggest bargains.

5. *Agency for Feeding Underprivileged at Special Centers.* At the four open-air centers for the tuberculous children, morning and afternoon feedings are given. For those children too far away from home to be there for lunch, the noon meal is provided in addition. The noon meal is also provided for children at the school for crippled children, the center for deaf children, and the boys' special school. Special care is taken to include the protective foods such as citrus fruits, other fruit juices, green and yellow vegetables, tomatoes, etc.

6. *Special Services.* a) *Dinners and parties.* The lunchrooms may serve dinners and refreshments for parties where they are given by bona-fide school organizations or in connection with approved activities of the school or board of education. These are means by which the lunchroom cooperates with the rest of the school and adds to the color and happiness of school life. Examples are football banquets, faculty and student club teas, home-room parties, etc.

b) *Faculty tearooms.* Methods of serving the faculty vary in the different schools. In about half, the teachers go through the cafeteria line with the students, but have separate dining rooms. This is the most economical means of serving them. In other schools there are separate cafeterias, including cafeteria counters, for the teachers.

In three schools there are tearooms. The lunchroom department prepares the food, and employees paid by the cafeteria have charge of the steam table, assembling and dishing out the food, and of the cash register. Student waitresses, trained in the home-economics department, serve the food.

This provides convenient service for the teachers. Care, of course, is taken not to exploit the students. Such work must be limited to that which has educational value to the student.

c) *Home-economics supplies.* Food supplies which the Division of Lunchrooms has on bid are available for foods classes. These articles of food have been listed with minimum quantities which teachers of food may order once a week (staples once a month) from the lunchroom manager. The cost of these supplies to the board of education is lowered because of the purchasing power possible through buying such large quantities for lunchrooms.

The Division Personnel

Lunchroom Managers. Educational Requirements. Cleveland lunchroom man-



A corner in the Central Office where the general purchasing, accounting, and payroll work are carried on.

agers are required to have regular teaching certificates showing that they have had special training for lunchroom management. Applicants are expected to have had specific training in institutional administration and especially focused on school-lunch management, food preparation, food chemistry, nutrition, personnel problems, and adequate business training.

Responsibilities of Managers. The lunchroom manager is responsible for her lunchroom. She is responsible for offering attractive, palatable, nutritious food; for the efficiency and morale of the employees; for the sanitation of the lunchrooms; for successful financial control; for accurate records and punctual reports; and to a large extent for desirable functioning of the lunchroom in the educational program.

Training Potential Managers. We have found it advisable to bring potential managers into the school system as assistant or cadet managers. These are given a year's training on the job, which gives each cadet a chance to find out if she is suited to do this work. It also gives her a chance to take the necessary responsibility slowly. Given the right material, it is a means by which the department can develop able managers. Training on the job is advisable, because, although college training is invaluable, the management of a lunchroom requires certain specific skills, knowledge, and practical experience not possible to learn in the classroom.

Employee Policies

Our employees are most important to the success of the lunchrooms. We believe they should be treated fairly. We appreciate their loyalty and conscientious work.

Compensation. Employees are paid the same hourly rate throughout the system for the same classification of work. Besides this hourly rate, employees are given their lunches and allowed 30 minutes on paid time for eating. Most of our employees belong to the Ohio State Public Employees' Retirement System. Four per cent is deducted from the pay of each member. The Division of Lunchrooms makes an equal

contribution for each from receipts. Uniforms and caps are provided for employees as is the laundering of them. Any accidents sustained by our employees while on duty are taken care of under the state industrial compensation.

Control of Health Hazard. Every employee must have a record of his physical examination on file. New appointees are required to have such certificates of physical fitness and ability to do the work on file before beginning work. Control of the health hazard of these food handlers is further effected while on the job by education in personal hygiene, techniques of handling food aimed at minimizing the use of bare hands, information regarding communicability of certain diseases, together with adequate supervision by the manager. Very satisfactory procedure has been worked out through the advice and in charge of Dr. Hartman of the Bureau of Medical Inspection of the board of education.

Job Specification. A committee of managers has listed the clear-cut minimum requirements for work to be done under the different classifications of employees. These are used as a basis for assigning work. Managers make out work schedules for every employee, which are kept on file at the central office.

Employee Record Card. Another record of importance is the employee record card. The manager makes out one for each employee. These are kept on file at the central office, and are kept up to date. If an employee is transferred from one school to another or leaves the system, the manager completes her record card. If an employee is dismissed, a definite record is kept of the reason. We feel that it is only fair to the employee to be told beforehand this reason for dismissal.

Equipment Policies

Program for Modernization. Since January, 1936, the Division of Lunchrooms has been paying for additional equipment and replacing and repair of present equipment. Most of the lunchrooms are at an



Standard recipes are used in all the school kitchens and cooks are required to use accurate measures and weights.

age where a great deal of replacement is required, and considerable outlays are necessary to keep equipment in steadily good repair.

Careful budgeting is necessary in order to meet this additional cost without raising the prices of lunches too much. We are doing three things:

1. Keeping a record of maintenance costs and costs of new equipment. This will be valuable kept over a period of years.
2. Setting aside a certain percentage of receipts each month for replacement.
3. Gradually carrying out a program for modernization.

Records of Costs of Equipment and Repairs. We are keeping a card file of large equipment by individual schools. Each piece of large equipment is listed with model, serial number, date purchased, record of repairs, and other pertinent information. These cards will show the performance of a given piece of equipment.

Standardization of Utensils. As our program of financial control progressed through the work of the experimental kitchen and committees of managers, and experiments in various schools with cost accounting, we realized that we must standardize small equipment more completely. Certain standard cooking and serving utensils are necessary for complete standardization of recipes. Examples are the sizes of cake and pie tins. Furthermore, standardization of the multitude of small utensils means greater purchasing power for the system. This is another and important step in food-cost control. Such technical details are necessary if we are to give every child who patronizes our lunchrooms

equal quality and quantity of food. Our standard recipe forms note the utensils to be used for cooking and serving.

Committee of Managers. Recently a large committee of managers did a splendid job of revision of our specifications and standards of equipment. Subcommittees worked on the various kinds, such as aluminum ware, glassware, etc.

During the year, exhibits, according to such kinds, were displayed for a certain length of time at the central office, so that every manager would be familiar with equipment specified. For example, at one meeting all cutlery was on display and some time was given to the explanation of its use and quality.

Experimentation. Much experimentation through practical use is following the work of the committees, such as tests to determine the best kind of serving spoons, china, etc.

Good scales are a necessity for checking deliveries, for food production, and for inventories. We are experimenting to find those costing the least which will enable us to do accurate work, quickly.

Standard Sizes of Steam-Table Pans. As

Classification and Hourly Rates of Pay for Employees in Cleveland School Lunchrooms	
First cooks	\$.52
Assistant cooks45
Pastry cooks47
Assistant pastry cooks45
Counter workers45
Cashiers and checkers45
Salad and sandwich makers45
Porters43
Miscellaneous workers42
Workers who deliver food from one institution to another in conjunction with his or her work50

replacement is justified, we are placing enamel steam-table tops and pans with stainless steel. Insets are standardized which allow two sizes of pans per panel, for flexibility of use.

Blueprints. The Industrial-Arts Department has made up-to-date blueprints for each individual school showing the kitchen layout, servery, and lunchrooms. These show the kinds of equipment. Details are given of the steam-table tops, showing sizes of openings, and stock sizes of steam-table pans and crocks.

The Experimental Kitchen

The experimental kitchen was established as a means of controlling costs, also to aid in maintaining or improving the quality of food offered in our lunchrooms. The most important work of the testing kitchen has been the working out of recipes which yield nutritious low-cost food; i.e., the biggest values possible for the money. For example, one of the first things done was to work out recipes for the inexpensive main dishes of popular demand, yielding quantity servings, three fourths of a cup each. These were launched first as "Warm Specials for Cold Weather" and sold at five cents. Now they are incorporated as steady offerings.

Testing Program an Activity of Whole Division. Intensive testing is done in the experimental kitchen located at West Technical High School. Of course, the testing is a project of the whole Division. Managers contribute new recipes, make suggestions on those tested, and send in reports after using the recipes. They report on the accuracy and clearness of procedure, and on the popularity of the dishes. Retesting is done after reports are in and before the recipe is added to our permanent file.

Activities of Experimental Kitchen. Activities of the testing kitchen have been as follows: (a) Testing and building recipes (method as well as ingredients is important); (b) experimentation to determine quality of food to specify for purchasing which is suitable and sensible for our needs; (c) testing of food products.

From time to time tests of quality are made of samples of food products on which bids are submitted, also samples of merchandise delivered to schools.

In this article the various services which a school lunchroom offers have been given. The lunchrooms exist because of student and faculty needs. All procedures of operation are caused by trying to meet these needs as efficiently and satisfactorily as possible with existing materials and conditions. The organization of the Division, background equipment, tested recipes and other activities of the experimental kitchen, and the personnel are major factors in effecting our purpose: good food each day toward good nutrition and good health for every student.

(A second article by Miss Hemmersbaugh will appear in the August issue which will discuss menus, purchasing, checks on quality, financial management, the training of employees and methods of encouraging better lunch selection.)

School Discipline Extends Beyond the School Grounds

Herbert W. Secor*

Home Study

The courts have been less in accord in upholding rules and regulations requiring home study. In the cases decided in favor of the school, it is to be noted that the issue covered is not specifically the reasonableness of a rule requiring study in the home.

An early case of record is that of *Balding v. State*. A Texas teacher assigned to one of his pupils two examples to be worked at home. The boy returned to school the following morning without the problems solved. When reprimanded by the teacher, he stated that he was willing to do the problems in school but would not do them at home. The teacher then attempted to punish the objecting pupil. A scuffle followed during which the pupil drew a knife and further emphasized his objections by threatening the teacher. The boy was tried for assault and found guilty. This conviction was upheld by the Supreme Court. In summing up the case the judge said:

Teachers have the right the same as parents, to prescribe reasonable rules for the government of children under their charge and to enforce by moderate restraint and correction obedience to such rules. This authority of a teacher over his pupils is not in our opinion necessarily limited to the time when the pupils are at the school-room, or under the actual control of the teacher. Such authority extends, we think, to the prescribing and enforcement of reasonable rules and requirements even while the pupils are at their homes.¹

Authorities should be slow to accept this as sound basis for establishing the principle that the school may require home study. The boy was found guilty of aggravated assault. The issue before the court was at no time the reasonableness of the rule promulgated by the teacher.

The Supreme Court of Georgia ruled similarly in the case of *Samuel Benedict Memorial School et al v. Bradford*. A pupil was instructed to prepare a paper. Her father wrote the paper for her and included in the text expressions improper and disrespectful to the teacher. The court upheld the teacher for the punishment of the pupil as follows:

Where a pupil has been instructed to prepare a paper on a given subject and does not do so, but reads a paper prepared by her father and containing expressions improper and disrespectful to the teacher, the offense is twofold; and although the school authorities may excuse and condone the preparation by the father of the paper actually read, and also the reading by the pupil the latter may still be punished for the failure to prepare a paper herself in compliance with instructions. If the punishment be the

preparation of a paper on the same subject at a later date and the pupil refuses to prepare it, such pupil may be disciplined by suspension or other punishment.²

It is here to be noted that the offense of the pupil in reality had little to do with the question of where the work was prepared.

Hobbs v. Germany illustrates clearly the limits beyond which school authorities may not go in controlling pupils while off the school grounds. The plaintiff, young Germany, was a pupil at the school of which the defendants were the teacher and trustees. The defendants adopted a rule by which they ordered the pupils to remain at their respective homes and study during the hours of from seven to nine in the evening. The father of the plaintiff attended church during these hours and frequently took his son along. The teacher became aware of this procedure and sought to punish the plaintiff. He was given the choice of either receiving corporal punishment or remaining in his classroom for a period of time after dismissal. Upon his refusal to choose either type of punishment, the defendants excluded him from school. The plaintiff instituted an action in equity to prevent the defendants from carrying out their regulations. It was held that the plaintiff was entitled to an injunction. The court said:

The trustees can make and enforce no rule inconsistent with the law. The power to do this is expressly prohibited in paragraph No. 4525 of the code of 1906. Certainly a rule which invades the home and wrests from the parent his right to control his child around his own hearthstone is inconsistent with any law that has yet governed the parent in this state and the writer of the opinion dares to hope that it will be inconsistent with any law that will ever operate here so long as liberty lasts and children are taught to revere and look up to their parents. In the home, the parental authority is and should be, supreme and it is misguided zeal that attempts to wrest it from them. By Code No. 4623, 1906, the teachers are given authority to enforce the rules and regulations prescribed for the schools and hold pupils to a strict account for disorderly conduct on the way to and from school, on the playgrounds, or during recess and suspend for good cause and such pupil from school and report the same to the board of trustees for review. These sections contain all the power the legislature had seen fit to give to the trustees or the teachers. It may not be easy to say with exact precision what rules may or not be adapted and enforced by the school authorities for the government of the school. With the general powers we are not concerned. We are simply called upon to decide this concrete case and unhesitatingly say that the rule attempted to be enforced is a nullity and beyond the power of the trustees to adopt or the teachers to enforce. It may be that the school authorities would have a right to make certain regulations and rules for the good government of the school, which would extend and control the child even when it has reached its

home; but if that power exists, it can only be done in matters which would *per se* have a direct and pernicious effect on the moral tone of the school, or have a tendency to subvert and destroy the proper administration of school affairs. We shall not undertake in this opinion to say in what such things shall consist in order to justify a regulation of the school that may reach in the home and have its effect there. When such a case comes before the court, it will be time enough to decide how far this authority may be extended. The distinguished chancellor was eminently correct in the decree, establishing the supremacy of the father and mother in their homes as regards the control of their children thereby sustaining the injunction, reinstating young Germany in school and declaring the regulation a nullity.³

This reasoning is substantiated in the case of *State v. Osborne*. A rule was adopted by a normal school prohibiting pupils from attending parties, entertainments, or places of amusement except by permission. The court held that such a rule could not be enforced against a pupil who lived with her parents and attended a party with their consent. The Court said:

The statute authorizing supervision or expulsion of a pupil contumacy, insubordination, or immoral conduct, did not warrant suspension.⁴

The case of *Dritt v. Snodgrass* is further confirmation of the limit beyond which school authority may not extend. The courts ruled in regard to a ruling that pupils could not attend social parties during the term that:

It certainly would not have been the design of the legislature to take from the parent the control of his child while not at school, and invest it in a board of directors or teacher of a school. If they can prescribe a rule which denies to the parent the right to allow his child to attend a social gathering except upon pain of expulsion from a school which the law gives him the right to attend, may they not prescribe a rule which would forbid the parent from allowing the child to attend a particular church or any church at all, and then step in *loco parentis* and supersede entirely parental authority? For offenses committed by the scholar while at school, he is amenable to the laws of the school; when not at school, but under the charge of parent or guardian, he is answerable to them alone.⁵

On the other hand we find the Supreme Court of Georgia sustaining a rule prohibiting the pupils from attending any movie, show or social function on any school night except Friday or Saturday, and providing for expulsion unless the pupils or the parents should agree to obey and observe the regulation.⁶

Since the courts of record seldom, if ever, agree in deciding a number of similar cases, usually the dicta are based upon

¹*Hobbs v. Germany*, 94 Miss. 469, So. 515, 22 LRANS 983.

²*State v. Osborne*, 24 Mo. App. 309.

³*Dritt v. Snodgrass*, 66 Mo. 286, 27 Am. Rep. 343.

⁴*Mangum v. Keith*, 147 Ga. 603, 95 SE 1.

*Mr. Secor who is principal of the Philmont High School, Philmont, N. Y., here concludes the paper begun in the June issue of the JOURNAL.

¹*Balding v. State*, 23 Tex. App. 172.

²*Samuel Benedict Memorial School et al v. Bradford*, 111 Ga. 801.

some particular phase of behavior rather than upon basic principles. Frequently the wise administrator will be careful in his administration of rules and regulations in regard to home study. He will do well to remember that until statute law or court decisions clarify the issues, it would seem that each case must be defended very largely upon its own merits. Hence extenuating circumstances are certain to be considerable, if not the determining factors.

Rules Requiring Pupils to Go Directly Home from School

The Supreme Court of Michigan in the action of *Jones v. Cody* sustained the right of the board of education of the City of Detroit to require pupils to go directly to their homes at the close of school. The plaintiffs were the owners of a small confectionary store situated opposite one of the public schools. Mrs. Jones had charge of the business. The defendant was the principal of the school. It was the habit of the defendant, after the various rooms had been dismissed at noon and night to straighten up his affairs inside the school building. If he noticed any of the boys loitering in the street, he told them to go home and if they were in the stores, he stopped and said: "Come boys, your time is up." He was then informed by Mrs. Jones that she did not wish him to come into her place of business to order the boys out. She was informed that if not allowed to enforce the rule as he was, he would be obliged to enforce it strictly and require the pupils to go directly home at the close of school sessions. Mrs. Jones made a complaint to the superintendent and wrote to the committee on teachers and schools. Mr. Cody received instructions from the board to enforce the rule. He had teachers read the rule to the pupils in the various rooms. Mrs. Jones claimed a distinct loss of trade and brought action. The court directed a verdict for the defendant. The ruling was stated by Justice Grant of the Supreme Court.

The rule and the method of enforcing it are reasonable, unless it be the law that those in control of our public schools have no jurisdiction over pupils outside of the schoolhouse yard. It is not only the legal right, but the moral duty of the school authorities to require children to go directly from school to their homes. Humanity and welfare of the country demand that a most watchful safeguard should, so far as possible, accompany children when required or allowed to be on the streets. No trader or merchant has the constitutional right to have children remain in his place of business, in order that they may spend money there while they are on the way to and from school.

The rule does not interfere with the right of the parent to send his child upon an errand, to a store or other reputable place, or to the home of a relative or friend to visit.⁷

Similarly, in an Indiana case, the Supreme Court held that a storekeeper had no right of action against the teacher and members of the school board. The teacher pursuant to instructions from the board requested his pupils not to patronize a certain near-by store selling confectionery and school supplies. A letter was sent to

parents of pupils threatening suspension for disobedience. The courts ruled that the school authorities had a right to enforce reasonable rules for the discipline and good government of the school. The acts of the school authorities were not unlawful.⁸

Publications Ridiculing School's Authority

The courts do not concur in the matter of upholding the school for punishment of pupils who write or cause to be written articles for publication.

The case of *Murphy v. Board of Directors of the Independent District of Marengo, Iowa*, is to point. The plaintiff wrote and caused to be published in the local paper an article holding the board of education up to ridicule. The defendant dismissed the plaintiff from school. In the absence of a regulation to cover the situation, the school board based its authority on a statute which provided for exclusion from school for gross immorality or persistent violation of school regulations. The Iowa Supreme Court said:

Our statute provides that the directors shall have the power to dismiss any pupils from school for gross immorality or persistent violation of school regulations. The statute does not authorize the board of directors to suspend the pupils for acts tending to destroy the peace and harmony of the school or inciting insubordination in others or for the ridicule of the directors. When proper regulations for the government of the school are made and brought to the knowledge of the pupils, they may well be held to the penalties for their violation; but for the board to visit the severest penalty within their power upon a pupil for an act out of school, not expressly or by implication even by general regulation, it is at variance with both the letter and spirit of our laws.⁹

A similar case in which the Supreme Court of Wisconsin ruled in favor of the school is that of *State ex rel Dresser v. District Board*. An older child wrote a poem ridiculing the rules of the school. He then persuaded two younger children to have it published. This act was considered by the school authorities to have a direct and injurious effect upon the order and discipline of the school. The paper supposedly found its way into the homes of many of the children attending high school. These children would be as much influenced thereby as if the writing had been posted in the schoolroom or there circulated and read. The lower court found that the suspension complained of was not an abuse of discretion. The court in denying an appeal stated:

There is abundant authority, that the school board or teacher may make rules to govern the conduct of pupils after school hours, and punish a violation thereof by suspension from attendance from school. This court, therefore, holds that the school authorities have the power to suspend a pupil from school for an offense committed outside of school hours and not in the presence of the teacher which has a direct and immediate tendency to influence the conduct of other pupils while in the schoolroom, to set at naught the proper discipline of the school, to impair the authority of the teachers, and to

bring them into ridicule and contempt. Such power is essential to the preservation of order, decency, decorum, and good government in the public school.¹⁰

The Supreme Court of Massachusetts in the case of *Morrison v. Lawrence* upheld the school's right to suspend pupils for the publication of articles tending to undermine the authority of the principal. However, in this case the expulsion was held to be unlawful as having been imposed without a fair hearing.¹¹

Participation in Athletic Contests in Violation of Rule

The case of *Kinzer v. Independent School District* illustrates the extent to which a school ruling may affect the activities outside of school hours. The board of education of Marion, Iowa, passed a regulation condemning football as dangerous and forbade the pupils to engage in football contests. The plaintiff caused to be printed and displayed posters advertising a game between the High School and a team from West Branch, Iowa. The game was played and for violation of the rule the plaintiff was suspended. It was argued by counsel for the plaintiff that the game was played on Saturday and at the County Fair Grounds. In denying a writ of mandamus the court held:

It is contended that the rule of the board under which the plaintiff was suspended, does not apply to conduct of the pupil of the school on holidays and outside of school hours, and that, if it is to be construed as having application to the action of pupils away from school grounds and on a day when school is not in session, it is unreasonable and invalid. But, in view of the general discretion given to boards of directors, we are not disposed to hold that the rule as applied in the present case by the defendant board is unreasonable or in excess of authority. They have no concern, it is true, with the individual conduct of the pupils wholly outside of the schoolroom and school grounds, and while they are presumed to be under the control of all members of the body politic; but the conduct of pupils which directly relates to and affects the management of the school and its efficiency is within the proper regulation of the school authorities. We have no doubt as to the power of the defendant board, in the exercise of its reasonable discretion or as to the management of the school, to determine that it was detrimental to the best interests of the school that pupils should be encouraged to engage in games of football with teams of other schools, and we think that their proper power, with reference to their encouragement or discouragement of the playing of football by pupils of the school was not limited to the high-school grounds, but extended to participation by the pupils in games as members of a team purporting to represent in any way the high school under the control of the defendant board; and we, therefore, reach the conclusion that, giving to the rule the interpretation which the board gave it to be applicable to the case of the plaintiff, such rule was not unreasonable nor in excess of the powers of the board. In short, we hold that the defendants as board have authority to prohibit the pupils of the school from playing football in a game purporting to be played under the auspices of the school, or on a team representing the school.¹²

(Continued on page 87)

⁷*State ex rel Dresser v. District Board*, 135 Wis. 619, 116 NW 232, 16 LRANS 730.

⁸*Morrison v. Lawrence*, (1904), 186 Mass. 456, 72 NE 91.

⁹*Kinzer v. Independent School District*, 129 Iowa 441, 31 LRANS 496, 105 NW 636, 6 Am. Cas. 996.

⁷*Jones v. Cody*, 132 Mich. 12, 92 NW 945, 62 LRA 160.

⁸*Guenther v. Altman et al*, 26 Ind. App. 587, 60 N. E. 355.

⁹*Murphy v. Board of Directors of Independent District of Marengo*, 30 Iowa 429.

Ranking State School Systems by Educational Efficiency Measures

Lester C. Furney¹

In an unpublished master's thesis entitled "The Ranking of the State School Systems"² the writer made a statistical comparison of the state school systems. In this study two separate surveys were made: the first ranked the states according to measures of educational efficiency; and the second ranked them according to measures of expenditures for education. The survey concerned with the educational efficiency ranking serves as the basis of this report. The second of the rankings, i.e., the rank-

ing of the states according to their expenditures for education will be reviewed in an article appearing in the August issue of THE AMERICAN SCHOOL BOARD JOURNAL.

The earliest attempt at ranking the educational systems of the states was made in 1912 by Leonard P. Ayres and was published in a Russell Sage Foundation pamphlet.³ The survey ranked the states according to ten selected measures of education efficiency. In 1920, Ayres made a second study, this time using ten criteria

of efficiency, five of which were concerned with financial matters.⁴

Frank M. Phillips in 1924, and again in 1925 made modifications of Ayres' work.⁵ Phillips made two worthy contributions. First, he corrected Ayres' ranking so that it took into consideration the deflated dollar and the reduced cost of living. Second, he ranked the states according to ten items, of which four dealt with sessions and

¹Graduate of the Department of School Administration, Ohio State University, March, 1939.

²Ohio State University, Columbus, Ohio, March, 1939.

³A Comparative Study of the Public School Systems in the 48 States (New York: Department of Education, Russell Sage Foundation, 1912), 33 pp.

⁴An Index Number for State School Systems (New York: Department of Education, Russell Sage Foundation, 1920), 70 pp.

⁵Educational Ranking of States by Two Methods (Milwaukee, Wis.: Bruce Publishing Company, 1925), 32 pp.

TABLE I - EDUCATIONAL EFFICIENCY BY STATES FOR 1935-36

State	Percentage of Enrollment in Attendance	Number of Days Attended	Number Days of School	Enrollment per 100 of Population	Percentage of Enrollment in High School
	1	2	3	4	5
Alabama.....	80.2	110.6	137.8	81.1	12.0
Arizona.....	80.1	134.7	168.2	79.8	18.9
Arkansas.....	78.2	117.5	150.3	82.3	13.3
California.....	88.0	156.0	177.3	99.0	27.2
Colorado.....	78.1	132.0	169.0	90.5	22.9
Connecticut.....	86.3	157.9	182.9	82.3	26.7
Delaware.....	86.0	156.0	181.4	80.5	24.9
Dist. of Col.....	81.7	143.8	175.9	104.0	22.7
Florida.....	79.5	136.9	172.3	98.0	17.3
Georgia.....	77.6	123.3	159.0	85.5	14.2
Idaho.....	84.4	145.3	172.1	94.6	26.8
Illinois.....	87.0	155.7	178.9	75.6	26.5
Indiana.....	89.7	153.3	171.0	86.6	26.1
Iowa.....	85.4	150.0	175.8	87.1	25.2
Kansas.....	86.4	148.6	172.0	87.6	25.7
Kentucky.....	78.0	122.6	157.1	82.2	13.4
Louisiana.....	82.5	130.4	157.9	74.5	16.8
Maine.....	80.3	157.2	176.1	83.3	22.4
Maryland.....	85.3	158.7	186.1	72.4	19.7
Massachusetts.....	88.8	157.1	176.6	85.9	29.3
Michigan.....	91.9	159.0	173.0	78.7	25.5
Minnesota.....	84.5	146.0	172.9	84.5	25.8
Mississippi.....	74.5	98.7	132.5	96.8	10.6
Missouri.....	83.1	147.8	177.9	82.7	20.7
Montana.....	88.7	156.0	176.0	81.8	29.0
Nebraska.....	86.3	151.3	175.4	87.0	25.7
Nevada.....	84.4	146.6	173.8	103.6	25.2
New Hampshire.....	87.4	154.5	176.7	71.3	26.0
New Jersey.....	84.5	157.6	186.8	83.8	25.4
New Mexico.....	94.2	165.5	175.6	75.8	14.9
New York.....	87.3	162.3	185.9	83.2	28.5
North Carolina.....	85.5	137.7	161.2	83.1	18.7
North Dakota.....	81.2	152.6	187.9	76.5	21.6
Ohio.....	90.7	166.3	183.3	79.6	26.3
Oklahoma.....	75.6	131.6	174.1	92.7	19.3
Oregon.....	86.8	149.8	172.6	91.0	30.2
Pennsylvania.....	87.2	158.2	181.3	80.2	24.2
Rhode Island.....	86.0	151.3	176.0	74.1	23.1
South Carolina.....	77.1	118.0	153.2	80.5	14.5
South Dakota.....	83.6	144.7	173.1	79.4	24.6
Tennessee.....	78.8	130.1	165.2	85.5	14.5
Texas.....	79.1	133.3	168.6	81.6	21.5
Utah.....	89.0	154.7	173.8	88.0	30.1
Vermont.....	87.6	152.6	174.2	77.3	18.7
Virginia.....	82.5	139.4	168.9	81.8	17.7
Washington.....	82.2	149.8	181.1	95.4	30.2
West Virginia.....	87.7	151.6	173.0	82.4	17.1
Wisconsin.....	89.5	158.6	179.5	78.0	29.2
Wyoming.....	82.5	145.6	176.7	94.0	26.1
High.....	94.2	166.3	187.9	104.0	30.2
Low.....	74.5	98.7	132.5	71.3	10.6
Mean.....	84.6	146.3	173.0	83.4	22.7

TABLE II - INDEX NUMBERS AND RANKING OF STATES
ACCORDING TO THEIR EDUCATIONAL EFFICIENCY, 1935-36

State	Percentage of Enrollment in Attendance	Number of Days Attended	Number Days of School	Enrollment per 100 of Population	Percentage of Enrollment in High School	Average	Rank
	1	2	3	4	5		
Alabama.....	80.2	55.30	68.90	81.1	36.0	64.30	48
Arizona.....	80.1	67.35	94.10	79.8	56.7	75.61	41
Arkansas.....	78.2	58.75	75.15	82.3	39.9	66.86	47
California.....	88.0	78.00	88.65	99.0	81.6	435.25	1
Colorado.....	78.1	66.00	84.50	90.5	69.7	77.56	32
Connecticut.....	86.3	78.95	91.45	82.3	80.1	83.82	11
Delaware.....	86.0	78.00	90.70	80.5	74.7	81.98	21
Dist. of Col.....	81.7	71.90	87.95	104.0	68.1	82.73	17
Florida.....	79.5	68.45	86.15	98.0	51.9	76.80	35
Georgia.....	77.6	61.65	79.50	85.5	42.6	69.37	44
Idaho.....	84.4	72.65	86.05	94.6	80.7	83.68	12
Illinois.....	87.0	77.85	89.45	75.6	79.5	81.68	23
Indiana.....	89.7	76.65	85.50	86.6	78.3	83.35	14
Iowa.....	85.4	75.00	87.90	87.1	75.6	82.20	20
Kansas.....	86.4	74.30	86.00	87.6	77.1	82.28	19
Kentucky.....	78.0	61.30	78.55	82.2	40.2	66.05	45
Louisiana.....	82.5	65.20	78.95	74.5	50.4	70.31	43
Maine.....	80.3	78.60	88.05	83.3	67.2	81.29	24
Maryland.....	85.3	79.35	93.05	72.4	59.1	77.84	31
Massachusetts.....	88.8	78.55	88.40	85.9	87.9	85.91	6
Michigan.....	91.9	79.50	86.50	78.7	76.5	82.62	18
Minnesota.....	84.5	73.00	86.45	84.5	77.4	81.17	25
Mississippi.....	74.5	49.35	66.25	96.8	31.8	63.74	49
Missouri.....	83.1	73.90	88.95	82.7	62.1	78.15	30
Montana.....	88.7	78.00	88.00	81.8	87.0	84.70	9
Nebraska.....	86.3	75.65	87.70	87.0	77.1	82.75	16
Nevada.....	84.4	73.30	86.90	103.6	75.6	84.80	7
New Hampshire.....	87.4	77.25	88.35	71.3	78.0	80.46	26
New Jersey.....	84.5	78.90	93.40	83.8	76.2	83.36	13
New Mexico.....	94.2	82.75	87.80	75.8	44.7	77.05	33
New York.....	87.3	81.15	92.95	83.2	85.5	86.02	4
North Carolina.....	85.5	68.85	80.60	83.1	56.1	74.83	39
North Dakota.....	81.2	76.30	93.95	76.8	64.8	78.61	28
Ohio.....	90.7	83.15	91.65	79.6	78.9	84.80	8
Oklahoma.....	75.6	65.80	87.05	92.7	57.9	75.81	37
Oregon.....	86.8	74.90	86.30	91.0	90.6	85.92	5
Pennsylvania.....	87.2	79.10	90.65	80.2	72.6	81.95	22
Rhode Island.....	86.0	75.65	88.00	74.1	69.3	78.61	29
South Carolina.....	77.1	59.00	76.60	80.5	43.5	67.34	46
South Dakota.....	83.6	72.35	86.55	79.4	74.4	79.26	27
Tennessee.....	78.8	65.05	82.60	85.5	43.5	71.08	42
Texas.....	79.1	66.65	84.30	81.6	64.5	75.23	38
Utah.....	89.0	77.35	86.90	88.0	90.3	86.31	3
Vermont.....	87.6	76.30	87.10	77.3	56.1	76.88	34
Virginia.....	82.5	69.70	84.45	81.8	53.1	74.31	40
Washington.....	82.2	74.40	90.55	95.4	90.6	86.63	2
West Virginia.....	87.7	75.80	86.50	82.4	51.3	76.74	36
Wisconsin.....	89.5	79.40	89.75	78.0	87.6	84.65	10
Wyoming.....	82.5	72.90	88.35	94.0	78.3	83.21	15
High.....	94.2	83.15	93.95	104.0	90.6	87.05	
Low.....	74.5	49.35	66.25	71.3	31.8	63.74	
Mean.....	84.6	73.15	86.50	83.4	68.1	79.15	

attendance, three with the results of teaching, and three with school costs.

Henry E. Schrammel, in 1926, while investigating the effectiveness of state educational organizations, deemed it advisable to rank the states in accordance with their educational efficiency.⁶ Schrammel used the average of eleven statistical items. Six of the eleven factors dealt with attendance and enrollment data, three with school costs, and two with illiteracy. In 1937, Douglas E. Scates made a revision of the ranking of the Schrammel study.⁷

The purpose of this report is to show how each of the forty-eight states and the District of Columbia compare in regard to the following five selected measures of educational efficiency:

1. The percentage of school enrollment in average daily attendance.
2. The average number of days attended by each pupil in average daily attendance.
3. The average number of days the schools were in session.
4. The enrollment per one hundred of population five to seventeen years of age.
5. The percentage of total enrollment in high school.

All data used in this survey were obtained from the United States Office of Education pamphlet *Statistics of State School Systems, 1935-36*.⁸

The writer has not attempted to weight the different items used in this survey. Index numbers have been prepared only for the purpose of simplifying the averaging and the ranking of the school systems. The indexes have not been prepared by the arbitrary judgment of the author as to the comparative degrees of importance of the five criteria used. Each item has been carefully chosen and each is considered as important as the next; the author, therefore, has made no attempt to make any item appear to be outstandingly important. Each item has been treated to bring the item into comparability with a common known standard of 100.

Table I shows how the states compare regarding the five criteria of educational efficiency. Column 1 shows the percentage of enrollment that is in average daily attendance; column 2, the number of days attended by the students; column 3, the number of days the schools were in session; column 4, the enrollment per 100 of population between the ages of five and seventeen; and column 5, the percentage of the enrollment that is in the high school.

In 1936, the percentage of the total enrollment in average daily attendance ranged from 94.2 in New Mexico to 74.5 in Mississippi. Twenty-five states attained

or exceeded the 85-per-cent attendance record, and three states; namely, Michigan, New Mexico, and Ohio, exceeded 90 per cent. The percentage of the United States was 84.6.

The average number of days attended by each pupil in average daily attendance in the nation in 1936 was 146.3. The range for the states was from 166.3 days in Ohio and 98.7 days in Mississippi. Twenty-five states exceeded the average for the nation.

The average number of days the schools were in session, excluding holidays, was 173, or slightly more than eight and one-half months. In nine states the length of the sessions exceeded 180 days, with North Dakota leading with 187.9 days. Alabama and Mississippi had less than 140 days of school. The average for the nation was 173.0 days.

In regard to the enrollment per 100 of population from five to seventeen years of age, the District of Columbia led with 104.0 pupils enrolled. New Hampshire was in last position with 71.3 children enrolled. The average for the nation was 83.4. It is seen that Nevada and the District of Columbia had more than 100 pupils enrolled per 100 of population from five to seventeen years of age.

The percentage of the total enrollment that was in the high school ranged from 30.2 in Oregon and Washington to 10.6 in Mississippi. In 20 states the percentage was more than the average percentage of 22.7 for the nation. In 1936, the states having less than 15 per cent of the total enrollment in the high school were as follows: Alabama, Arkansas, Georgia, Kentucky, Mississippi, New Mexico, South Carolina, and Tennessee.

Index numbers have been substituted for the data in Table I and these numbers have been recorded, totaled, and averaged in Table II. Table II also shows the corresponding position of the states in the final ranking. According to the table, California has an index number of 87.05 which gives California first place in the ranking

of the states according to the five criteria of educational efficiency used in this survey. Washington, Utah, New York, and Oregon follow California in the order named. At the bottom of the final ranking is Mississippi with an index number of 63.74. The average index number for the nation is 79.15.

For the convenience of the reader the final ranking of the states has been arranged in quartile groupings, and these data are presented in the form of a shaded map of the United States (See Fig. 1). The number shown for each state in Figure 1 is its ranking compared with the other states. The states ranking highest are in the western portion of the nation. In particular, California, Oregon, Utah, and Washington are high ranking states. The southern states are within the lower 50 per cent, and the fourth quartile is composed entirely of southern states.

Objections have frequently been raised, against studies of this type, that a comparison cannot fairly be made to include states that vary greatly in the urbanization of their population. For example, the District of Columbia is chiefly the city of Washington, while North Dakota has more than 80 per cent of its population living in the rural areas. It would be distinctly unfair to compare the educational advantages, efficiency, and opportunities of Washington, D. C., with those of North Dakota. Therefore, to care for the differences existing between states in this matter, the author has arranged the states so that they will be compared only to states similar to themselves in respect to the matter of population concentration.

Table III shows the states ranked according to three classifications of population. Column 1 is a ranking of the states that have from 66.8 to 100 per cent of their population living in cities. Column 2 shows the ranking of states that have from 33.4 to 66.7 per cent of their population living in cities, while column 3 is for those states having less than 33.3 per cent of

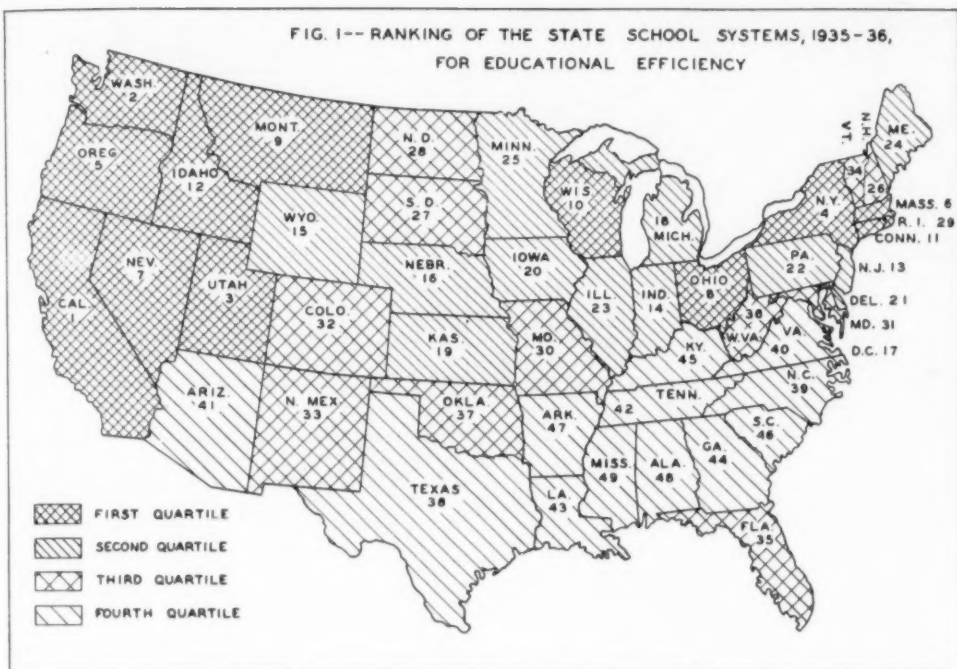
TABLE III. RANK OF THE STATES, ACCORDING TO THEIR EDUCATIONAL EFFICIENCY, ARRANGED BY PERCENTAGE OF URBANIZATION OF POPULATION

Rank	100% to 66.8% living in cities	66.7% to 33.4% living in cities	33.3% to 0% living in cities
1	California	Washington	Idaho
2	New York	Utah	Wyoming
3	Massachusetts	Oregon	South Dakota
4	Ohio	Nevada	North Dakota
5	Connecticut	Montana	New Mexico
6	New Jersey	Wisconsin	Vermont
7	Dist. of Col.	Indiana	West Virginia
8	Michigan	Nebraska	North Carolina
9	Pennsylvania	Kansas	Virginia
10	Illinois	Iowa	Georgia
11	Rhode Island	Delaware	Kentucky
12		Maine	South Carolina
13		Minnesota	Arkansas
14		New Hampshire	Alabama
15		Missouri	Mississippi
16		Maryland	
17		Colorado	
18		Florida	
19		Oklahoma	
20		Texas	
21		Arizona	
22		Tennessee	
23		Louisiana	
Index average	83.52	80.23	73.62

⁶"The Organization of State Departments of Education," *Ohio State University Studies*. Bureau of Educational Research Monograph, Number 6, Chapter 9 (Columbus, Ohio: The Ohio State University Press, 1926).

⁷"Revised Index Number of State School Systems," *THE AMERICAN SCHOOL BOARD JOURNAL*, XCIV (June, 1937), pp. 52, 53.

⁸*Statistics of State School Systems, 1935-36*. United States Office of Education, Bulletin, 1937, Number 2, Advance Pages (Chapter II of the Biennial Survey of Education in the United States: 1934-36) (Washington, D. C.: Government Printing Office, 1938), 126 pp.

FIG. 1--RANKING OF THE STATE SCHOOL SYSTEMS, 1935-36,
FOR EDUCATIONAL EFFICIENCY

their population living in cities. The term *city* according to the United States Census Report refers only to those incorporated areas which have a population greater than

2,500.⁹ In this study the United States Census Report of 1930 served as the basis of the state's classification.

⁹Fifteenth Census of the United States, 1930, p. 15.

The average index number for the states in each group is also shown in Table III. The range of indexes is from 83.52 to 73.62. It is of particular importance to note that there is a decrease in efficiency as one proceeds from urban areas to rural areas.

In conclusion, the author wishes to point out several very important facts that have been brought to light in this investigation: First, the western states rank high in educational efficiency. This is shown by the fact that California, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming ranked within the first quartile of the final efficiency ranking. Second, the southern states ranked very low in educational efficiency. This is proved by reference to Figure 1 which shows that the fourth quartile of the education efficiency ranking is composed entirely of the states located in the southeastern portion of the nation. The third important bit of evidence brought forth is that the educational efficiency standard decreases as one proceeds from the urban areas to the rural areas. When the states were compared to those states of their own population type, it was found that the index average for the three groups showed a marked decrease when one proceeded from urban to rural areas.

A Simple Plan of Pupil Adjustment

D. H. Loree¹

Lack of available jobs and compulsory legislation have combined to encourage some youths—and force others—to remain in school. Due to this tremendous increase in enrollment in the secondary school numerous problems are encountered which received scant attention a quarter of a century ago. Whereas a generation ago the older boys and girls living in the country attended school only from December to March, they now remain through high school. The town boy who used to quit as soon as he could get a job, usually in the seventh or eighth grade, now continues until graduation from the secondary school.

This article presents a guidance plan which has been used advantageously in a small rural four-year high school; in a medium-sized senior high school in a residential community; and in a large six-year high school in an industrial city. It is fair to assume that a plan which has successfully met pupils' problems in such a variety of situations would function well in practically any type of secondary school.

Just as the physician diagnoses ailments and prescribes treatment, so must the school determine the underlying causes of maladjustment and administer remedial procedures. The classroom must be considered primarily a workroom, rather than

a place in which to recite what has already been learned. Thus much of the time which would have been given to oral examination can be used more advantageously in guiding the efforts of the individual pupil toward a more systematic solution of the problems encountered.

Five Significant Factors

The following five factors are considered significant in this plan for pupil achievement: (a) development of sustained attention—ability to hold oneself to a task until it is successfully completed; (b) working to capacity, regardless of how much or how little his neighbor is doing; (c) cooperation with his fellow workers—pulling his share of the load without grudging; (d) accepting orders from those in authority to give them; so that when he is placed in a position of authority he will have developed enough backbone to see that his plans are enforced, (e) development of self-discipline, rather than depending on someone else to put him in place frequently.

Very early in the term, the teachers attempt to discover the specific abilities of each pupil in order that he may be enabled to do the best work of which he is capable. These findings, supplemented by the Otis Self-Administering Test of Mental Ability and the Sangren-Woody Reading Test,

give sufficient information on which to base a procedure designed to produce correct learning habits.

Procedures Pertaining to Maladjusted Pupils

This discussion is limited to a consideration of problem cases — those who have not made desirable adaptations or acquired necessary abilities.

The teacher uses Form I in referring to the office a pupil who continues to ignore her suggestions. For example: negligence in preparing work promptly, completely, and accurately; refusal to participate agreeably in classroom procedures; reluctance to do more than the minimum assignment, though possessing great ability. Or perhaps he is discourteous, exhibiting poor attitude in classroom, corridors, and elsewhere in the building. The report cites specific shortcomings or misdoing; it indicates what remedial measures were attempted, and it recounts the pupil's reaction.

When called for an office conference, the pupil is given an opportunity to read the report and to indicate whether he thinks that it represents the situation correctly. If he desires, he may state wherein he thinks it inaccurate. Usually he considers the incident has been reported accurately.

He is asked to state in his own words

¹Principal of High School, Hollidaysburg, Pa.

HOLLIDAYSBURG PUBLIC SCHOOLS
The High School
SUBJECT REPORT — (BOYS)

To the Principal: _____ Date _____

7 8 9 10 11 12
Circle the Year

is unsatisfactory in _____

Specific Causes:

1. _____
2. _____
3. _____
4. _____

What you have done to remedy: _____

Teacher _____

Remarks by Office _____

Teacher's O. K. _____

Form I—Report of failure in subjects.

what was expected of him, and to tell why he was not complying. The question is raised regarding his *desire* to do what he knew was expected of him, and of his *determination* to do what he knows ought to be done. He is led to see the significance of these factors in any endeavor, whether in school or out. He is given a chance to plan the solution of his difficulty. The counselor aids by giving suggestions; but the burden of the planning is placed on the pupil. Thus, emphasis is in the direction of good activity in the future; rather than punishment for past omissions or misdeeds. At the bottom of the form the counselor writes the specific decisions made during the conference. The report is given to the teacher who signs and returns it for filing in the pupil's cumulative-record folder in the office.

At the close of the conference the pupil is supplied with Form II, dated a week in advance, to take to his teacher.

On the designated day the teacher returns the follow-up report to the child to bring to the office for a second conference. This enables the maladjusted pupil to begin to realize a positive goal—the improvement of his situation within one week. Congratulations are usually in order when the follow-up report is brought in. Should the report be unsatisfactory, we discuss specific shortcomings listed thereon and arrange for daily reports as indicated in Form III, which requires a daily check by each teacher with whom the pupil is in difficulty.

The pupil continues to bring in the daily reports until improvement indicates that it is no longer necessary. In the event this does not result in desired interests, attitudes, and aptitudes, the parents are requested to come for a conference. Almost without exception they are favorably impressed by the careful consideration their child has received. They appreciate that the school had canvassed the situation

carefully and thoroughly before bringing it to their attention.

Some Case Histories of Problem Pupils

Several case histories are given here to show the specific results of these procedures.

Case History of Pupil X.—The Otis Test showed that Pupil X has an I.Q. of 120. He did well in all phases of the Sangren-Woody Test except in rate of reading. The teacher of French reported that Pupil X was tardy in getting to his work after entering the room, that he was distracted frequently, and that he argued vigorously against situations which were readily understood by other members of the class. Some days he would prepare his assignment in full. Other days he would do only a portion of the work, and that very carelessly. The teacher reported that during a conference X would admit his shortcomings and faithfully promise to improve. But on succeeding days he became steadily worse.

During the office conference he readily admitted his playful and perverse attitudes, and lack of purposeful achievement. He decided that it was time to get to work and to cooperate with the teacher and with his fellow students. He was given a follow-up form on which his teacher would record expected progress during the next five days.

When he brought in the report the following week, he showed small concern about his continued mischievousness. Inquiry among other teachers indicated that he was doing a little better in their courses. In history he was "a smarty who'd underhanded things on the sly." He usually worked and recited well, but he required too much watching. In biology he worked sporadically, achieving far below his ability. Only in geometry was he satisfactory.

He accepted the correctness of the several reports and again promised improvement. Daily reports from all teachers showed continued inadequate preparation and disturbing attitudes.

His father, a salesman who was at home only over week ends, responded to my request for a conference. He understood the situation at once and volunteered additional information regarding his son's recent poor attitude at home. Plans had been made for him to go to a small selective college. The father pointed out to his son that the school had done everything possible, but that he had not responded very well. He continued by saying that henceforth only satisfactory reports would be tolerated.

A week later the office was pleased to report to the home that X had made splendid advancement in all situations. An even better report was sent at the conclusion of another week. Throughout the remainder of the term—and thus far this year—he has done remarkably well without any prompting by the school.

Case History of Pupil N.—Pupil N made marks well above the average of her class throughout the elementary and junior high schools. In her sophomore year her scholarship dropped a bit, and she was referred to the girls counselor twice for misdemeanor. In the junior year her marks were slightly above the average of the class, and she was referred to the office

HOLLIDAYSBURG PUBLIC SCHOOLS
THE HIGH SCHOOL
DAILY REPORT

Date _____

Name _____

A check mark indicates that you were satisfactory; "U" that you were unsatisfactory. Bring this to the office at 4:00. Teachers may use the reverse side for comment.

Teacher	Attitude	Industry	Conduct	Progress
1				
7				

Form III—Daily report which the pupil is required to hand each of his teachers during the day and return to the office at the close of his school day.

five times during the first semester. Exhibiting a frivolous attitude, she resented corrective procedures on the ground that it should be none of the school's business what she did so long as she passed in her courses of study.

Near the close of the semester she was informed that if she did not change her attitude, and improve in her subject preparation, it would be necessary to call the matter to her parents' attention. Whereupon she acknowledged that she had been acting very foolishly at school, and indicated that her parents were disappointed in her conduct at home.

She requested a final chance, assuring the counselor that her performance would be satisfactory. Shortly thereafter she was the leading student in every subject. At the beginning of the second semester she enrolled in two clubs where she made outstanding contributions. Many of her friends followed her example by changing their frivolous attitude to one of courtesy and serious purpose.

In her senior year she was elected president of the girls' league, an organization of all the girls in school. She exhibited outstanding leadership in this and other activities. Her scholarship rated near the top of the class for her final year. Following graduation she obtained a secretarial position in which she is making steady advancement.

Case History of Pupil Y.—Unfortunately not every case turns out as satisfactorily as the ones just recounted. Pupil Y, with an I.Q. of 90, lived in a nonhigh-school district. Having failed in the ninth grade of our junior high school, he went to a vocational high school the following year, repeating the work of the ninth grade. He began his tenth year there, continuing until October when he was challenged for truancy. Instead of clearing up the situation, he presented himself for admission to our senior high school, stating that he could no longer obtain transportation to the other school. Within a week two teachers reported that he was too talkative, and that he made virtually no preparation. Moreover, he poked fun at corrective procedures. When called for a conference, he said that he did talk once in a while, but he insisted that he was making adequate preparation. He agreed to stop talking unnecessarily. On the following day a third teacher reported that Y was a constant nuisance—that he ignored all requests to cooperate with the pupils. Subsequent daily reports indicated that he was less of an annoyance; but that his preparation was still inadequate. When called for a second conference he became argumentative, insisting that he was doing as well as the rest of the class.

Two letters to his father outlining the difficulty in considerable detail brought no response; nor did they result in the boy's improvement in attitude or industry. Early in the second semester Y was suspended after he had failed in all subjects. His father came to request reinstatement.

(Concluded on page 91)

HOLLIDAYSBURG HIGH SCHOOL
FOLLOW UP REPORT

The pupil will get this report from the teacher on date _____ indicated and bring it to the office for conference.

Name _____ Date _____

Teacher _____ Subj. _____

Conduct _____ Effort _____

Remarks: _____

Form II—Follow-up report used by teacher. Space is allowed under remarks for a complete explanation.

Laboratory Apparatus Basic to Science Teaching in Small High Schools

Harold E. Wise¹

To a considerable extent science subjects offered in small high schools are under the direction of a single teacher and are frequently taught in the same or adjoining classrooms. Aside from any consideration of the demonstration-individual laboratory controversy, economy demands that much of the experimental work done in connection with these science classes must be by way of the class demonstration. Experienced science teachers are well aware of the fact that certain items of demonstration apparatus may profitably be used in connection with two, three, or in some cases all four of the major sciences—physics, chemistry, biology, and general science. Economy and sound administrative practice again forbids that duplicate demonstration apparatus be stocked for use in each of the respective science subjects. It follows that it is necessary and desirable to maintain a basic stock of such items as are most frequently used in connection with the demonstrations accompanying two or more of the science subjects offered. In addition to this basic material there are, of course, certain specialized items which are necessary for each of the four major sciences. However, it seems reasonable that the purchase of such specialized equipment should follow the stocking of those more basic items which find widespread use in the development of the entire science program. It is the purpose of this study to compile and present a list of such basic apparatus.

The report of the work of Holy and Sutton,² in which overlapping items are indicated in both the individual and general lists for each of the major high-school sciences, served as a starting point for the solution of the problem. While the applicability of the findings of this entire study to the immediate needs of the small schools of a state like Nebraska is questioned, it was apparent that the overlapping items indicated in the study might serve as the nucleus of a check list to be submitted to Nebraska science teachers employed in small schools for evaluation in the light of their own needs.

As a first step, therefore, all individual items of apparatus occurring in two or more of the specialized recommendations published in the Holy and Sutton study were listed. This included overlapping

TABLE I. List of Items of Apparatus in Order of Decreasing Necessity for Performing Demonstrations in "Science," Showing Quantity, Average Total Price, and Cumulative Total Price

No. of Items	Items of Apparatus	Percentage of Teachers Checking the Item as			Average Total Price	Cumulative Total Price
		Neces- sary	Desir- able	Unnec- essary		
1	2	3	4	5	6	7
4	Meter sticks, maple, Eng. and Met.	93	5	2	\$ 1.09	\$ 1.09
6	Magnets, bar, 6 x 19 x 150 mm.	90	6	3	1.96	3.05
1 lb.	Iron filings, with sifter top.	89	8	3	.27	3.32
6	Supports, ring stand, 3 ring, 5 x 8 in. base.	89	11	0	6.00	9.32
2 pkg.	Corks, assorted, No. 0-11.	88	11	1	1.03	10.35
6	Wire gauzes, asbestos, center 20 mesh, 5 in.	87	12	1	.65	11.00
12	Stoppers, rubber, 1 hole, No. 3.	84	14	2	.26	11.26
6	Thermometers, double scale, 100° C. and 220° F.	84	13	2	6.62	17.88
2	Lenses, double convex, 10 cm. focus, 3.75 cm. diam.	83	16	1	.67	18.55
5 lb.	Tubing, glass, 5 to 8 mm. assorted.	83	16	1	2.55	21.10
12	Stoppers, rubber, 1 hole, No. 1.	83	16	1	.20	21.30
12	Stoppers, rubber, 2 hole, No. 3.	83	16	1	.26	21.56
12	Stoppers, rubber, 2 hole, No. 4.	83	15	2	.33	21.89
2 sets	Balance weights, slotted, on holder 10-500 g.	83	14	3	5.57	27.46
12	Stoppers, rubber, 2 hole, No. 6.	83	14	3	.49	27.95
2	Graduates, cylindrical, 250 cc.	82	17	1	1.49	29.36
6	Graduates, cylindrical, 100 cc.	82	13	5	2.98	32.34
2	Microscopes, compound, two oculars, two objectives, in case.	81	18	1	144.00	176.34
6	Dishes, evaporating, porcelain, No. 00A, 75 mm.	81	17	2	1.20	177.54
6	Test-tube holders (wire clamp)	81	17	1	.41	177.95
3	Compasses, magnetic, 25 mm.	81	15	4	.69	178.64
2 sets	Weights, with hooks, 10-1000 g., in wood block	81	15	4	8.93	187.57
12	Bottles, wide mouth, 4 oz.	81	14	4	.42	187.99
8	Dry cells.	80	14	4	2.69	190.68
1 lb.	Wire, copper annunciator, No. 20.	80	15	5	.66	191.34
30 ft.	Rubber tubing, 1/4 in.	80	14	5	2.35	193.69
4	Funnels, glass, 75 mm.	80	14	5	1.08	194.77
4	Magnets, horseshoe, 4 in.	80	14	5	.65	195.42
4	Bunsen Burners*	80	13	7	1.76	197.18
2	Bells, electric, 2 1/2 in. gong.	79	20	1	.79	197.97
4	Test-tube racks, 6 tube.	79	19	2	1.47	199.44
36	Test tubes, soft, 6 x 3/4 in.	79	19	2	.77	200.21
6	Thistle tubes, 30 cm. stem.	79	18	2	.74	200.95
4	Forceps, laboratory, 5 in.	79	17	4	.32	201.27
6	Pulleys, double, bakelite.	79	17	3	2.12	203.39
1	Friction rod, vulcanite.	78	17	5	.25	203.64
2	Thermometers, minus 5° to 200° C.	78	15	7	1.87	205.51
1 set	Cork borers, set of 6.	77	20	3	.70	206.21
3	Prisms, equilateral, 75 mm. with 28-mm. faces	77	20	2	1.64	207.85
1/4 lb.	Wire, copper, bare, No. 20.	77	18	4	.23	208.08
1	Friction rod, glass.	76	23	1	.33	208.41
6	Test-tube brushes.	76	23	1	.40	208.81
6	Clamps, Burette.	76	21	2	1.76	210.57
6	Ring-stand clamps, right angle.	76	21	2	1.32	211.89
2	Mirrors, plane, 4 x 15 mm.	76	20	4	.19	212.08
6	Pulleys, single, bakelite.	75	22	3	1.52	213.60
1	Pump, lift, glass model.	75	20	5	1.38	214.98
12	Beakers, "Pyrex," 100 cc.	75	17	8	2.00	216.98
72	Microscope slides, blanks, 3 x 1 in.	74	22	4	.43	217.41
2	Tuning forks, C', 256 vps.	74	22	4	2.50	219.91
12	Test tubes, soft, 8 x 1 in.	74	21	5	.55	220.46
12	Test tubes, soft, 4 x 1/2 in.	74	19	7	.15	220.61
12	Beakers, "Pyrex," 150 cc.	74	19	6	2.12	222.73
4	Balances, spring, 8 oz., 250 g.	74	17	9	4.63	227.36
4	Medicine droppers.	74	16	10	.10	227.46
2	Lenses, 20 cm. focus.	73	25	2	.58	228.04
12	Flasks, "Pyrex," 250 cc.	73	22	5	2.52	230.56
4	Magnifiers, tripod.	73	22	5	2.83	233.39
2	Tuning forks, 512 vps.	73	22	5	2.50	235.89
1 box	Microscope slide-cover glasses.	73	21	5	.49	236.38
2	Trip scale, agate bearing.	73	20	7	17.53	253.91
1	Silk pad.	72	23	5	.40	254.31
12	Candles, paraffin.	71	21	8	.24	254.55
1	Contact key.	71	21	7	.90	255.45
3	Wood Blocks, waterproofed.	71	19	10	.78	256.23
1	Barometer, Aneroid.	70	25	5	5.00	261.23

¹Asst. Professor of Secondary Education and Supervisor of Physical and Biological Sciences, Univ. of Nebraska. The writer acknowledges the cooperation and suggestions of the Central Scientific Company, Chicago Apparatus Company, and W. M. Welch Company, without which the evaluation, in terms of current prices, of those items of apparatus included in this report would have been impossible.

²Holy, T. C., and Sutton, D. H., "Lists of Essential Apparatus for Use in High School Sciences," Bureau of Educational Research, Monograph No. 12, Ohio State University, 1931.

(Table I.—Concluded)		Neces- Desir- Unnec-			Average	Cumu-
Items	Items of Apparatus	sary	able	essary	Total	lative
1	2	3	4	5	Price	Price
12	Glass plates, plane, 4 x 4 in.	70	24	6	.39	261.62
1 roll	Wire, picture, No. 1.....	70	22	8	.19	261.81
4	Alcohol lamps, 4 oz.*.....	70	19	11	1.60	263.41
4	Balances, spring, double scale, 2000 g.	69	21	10	2.20	265.61
1	Pipette, Mohr's, 10 cc.	69	20	5	.38	265.99
1	Air pump, plate with stopcock.....	69	20	11	6.40	272.39
8	Pinchcocks, screw compression.....	68	27	4	1.47	273.86
12	Beakers, "Pyrex," with lip, 400 cc.	68	26	6	3.12	276.98
1	Galvanometer, D'Arsonval, jewel bearings....	67	25	8	8.75	285.73
3	Pneumatic troughs, enameled steel.....	66	28	6	2.27	289.00
2	Mortars, porcelain, with pestles, 100 mm.	66	27	7	1.15	290.15
12	Flasks, "Pyrex," 500 cc.	66	21	11	3.12	293.27
4	Files, triangular, 5 in.	66	21	2	.45	293.72
1	Air pump, vacuum and pressure combination	66	30	5	4.00	297.72
1	Pump, force, glass.....	65	30	5	1.38	299.10
12	Beakers, "Pyrex," 250 cc.	65	28	7	2.36	301.46
1	Electrolysis apparatus, battery jar type.....	65	27	8	1.85	303.31
4	Funnels, glass, 100 mm.	65	27	10	1.41	304.72
2	Calorimeter, double wall, fiber ring.....	65	24	11	3.87	308.59
1	Flannel Pad.....	64	29	7	.23	308.82
12	Flasks, Erlenmeyer, "Pyrex," 125 cc.	64	27	9	2.00	310.82
2	Beakers, "Pyrex," 600 cc.	64	21	15	.59	311.41
6	Watch glasses, 3 in.	63	27	10	.27	311.68
4	Wing tops for Bunsen Burners*.....	63	24	13	.33	312.01
24	Rulers, Engl. and Met., 12 in.	63	24	12	.83	312.84
12	Bottles, wire mouth, glass stoppers, 8 oz.	63	23	13	4.83	317.67
1	Hydrometer, for heavy liquids.....	62	27	11	.48	318.15
3	Hydrometer jars, 2 x 15 in.	61	29	10	1.75	319.90
1	Hydrometer, for light liquids.....	61	27	12	.48	320.38
2	Telegraph keys.....	60	34	6	4.13	324.51
6	Push buttons.....	60	30	10	.88	325.39
1	Barometer, tube, 80 cm. long.....	59	30	11	.65	326.04
2	Flasks, "Pyrex," 1000 cc.	59	24	17	.77	326.81
3 sq. ft.	Rubber dam.....	58	36	5	.55	327.36
30 ft.	Rubber tubing, 3/16 in.	58	29	13	2.00	329.36
2	Telegraph sounders, 4 ohms.....	57	35	8	4.67	334.03
1	Bell jar, fitted for stopcock.....	57	26	16	9.00	343.03
4 sq. ft.	Copper sheet, No. 30.....	56	31	13	1.67	344.70
5 ft.	Tubing, rubber, 1/4 in.	56	27	16	.45	345.15
3	Dissecting tool sets.....	55	25	20	3.15	348.30
1	Telephone receiver.....	54	37	9	1.85	350.15
1	St. Louis motor.....	53	38	9	3.15	353.30
1	Condenser, Leibig, 12-in. jacket.....	53	28	19	.80	354.10
4	Battery jars, clear glass, 4 x 5 in.	52	36	12	1.73	355.83
1	Osmosis apparatus, simple form.....	51	37	12	.39	356.22
4 prs.	Petri dishes, 75 mm.	51	37	12	1.33	357.55
4	Battery jars, clear glass, 6 x 8 in.	51	31	18	2.80	360.35
1	Funnel, glass, 150 mm.	51	31	17	.59	360.94
1	Electromagnetic attachment for St. Louis					
	motor.....	48	32	20	.95	361.89
2	Hydrometers, universal.....	48	32	20	2.73	364.62
1	Forceps, bone, 190 mm.	47	17	36	4.52	369.14
1	Bell jar, glass stoppered, 1 gal.	46	33	21	3.70	372.84
2	Calorimeters, 3 x 5 in.	40	34	25	.93	373.77
4	Water baths, copper, 5 in.	39	37	24	6.20	379.97
1	Bell jar, 2 gal.	38	27	35	4.82	384.79
4	Platinum loops, glass handles.....	37	41	21	1.51	386.30
1	Model steam engine.....	34	45	20	6.20	392.50
1	Aquarium, aluminum frame, 4 gal.	28	54	18	4.33	396.83

*Teachers making use of this list should choose between Bunsen Burners and alcohol lamps depending upon the availability of gas in the laboratory.

items, from both the individual and general lists for biology, chemistry, physics, and general science. The resulting list, of course, contained many duplications which were eliminated before proceeding further. The list was then rechecked against minimum apparatus lists for each of the specialized sciences available from the state departments of education of several mid-western states and items which, in the opinion of the writer, had possibilities of duplicate use in any two of the four major sciences were added. Next numbers indicating a quantity of each item which apparently would adequately meet conditions in the small schools of the state were assigned to each individual item and a check list was prepared.

This check list was submitted, through the superintendent, to the science teacher in each accredited high school in the state having an average daily attendance of from 75 to 300 pupils (212 schools). Of the 212 questionnaires submitted, usable replies were received from 96 science teachers (45.28 per cent). This relatively small percentage of replies may partially be accounted for by the fact that the inquiry did not reach the superintendents until the first week in May, 1937, only two weeks before many of the smaller schools closed.

With the 96 evaluations in hand, the percentage of the science teachers replying who considered each item to be "necessary," "desirable," or "unnecessary" for performing demonstrations in at least two

sciences was calculated and the entire list rearranged in the order of decreasing "necessity," dropping those items considered "necessary" by less than 25 per cent of the evaluating group. The quantity of each item considered to be correct was computed by averaging, in each case, the quantities indicated in the 96 replies. If the teacher checking the list had not altered the suggested quantity, the tentative figure included in the check list was considered as the recommended quantity, while in cases wherein this tentative figure had been changed, the quantity recommended by the teacher was used in computing the average, Column 1 in Table I.

After the items were ranked in the order of decreasing "necessity" and the average quantity of each item computed, the list was submitted to three apparatus companies with the request that they submit current total prices for the quantity of each item listed. The average of the total prices submitted by these companies for each item of apparatus together with the cumulative total price was then listed opposite each item, Columns 6 and 7 in Table I.

If consensus of opinion of those most intimately associated with the teaching of science is a valid criterion upon which to base judgment, the list presented in Table I should be of value to superintendents, principals, and science teachers in small schools. It is possible that those interested in building up the demonstration equipment available for science teaching would do well to provide such basic apparatus usable in connection with several science subjects before more highly specialized items are considered. This point of view becomes increasingly more important when consideration is given to the present tendency toward further integration of the high-school sciences.

In order to further clarify and emphasize the point of view of the report, the writer wishes again to point out that the list herein presented is in no case intended to be considered as representing those items of apparatus thought to be necessary for the teaching of all science subjects in the small high school. On the other hand it represents a "basic" list of items reported to be the most necessary and most frequently used demonstration apparatus, which should in every case be supplemented by more specialized items if effective instruction is to be given in each of the specialized branches of science now represented in the small high school.

TEACHER PERSONALITY

The teacher's personality is important first because of its influence upon the pupils. While he instructs them they are learning the mathematics or history or bookkeeping that he is teaching; but at the same time they are catching his personality. And since their success in life is determined to a greater extent by what they are than by what they know, the teacher's personality is more important to his pupils than the knowledge of subject matter and mastery of the art of instruction.—Arthur G. Skeeles, North High School, Columbus, Ohio.

Scouting California's Activity Classrooms

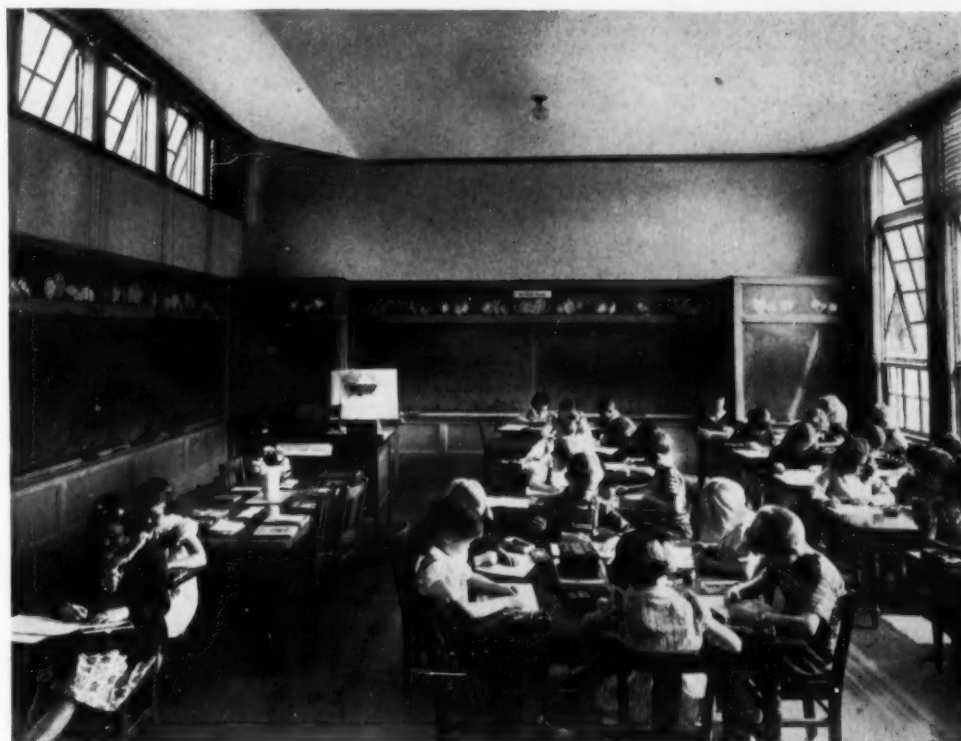
Charles K. Sumner¹

The modest purpose of this survey is to remind ourselves, both architects and laymen, of what has been going on in the elementary-school world, and to point out some of the interesting problems which progress brings in this field of planning and design. And further, there is the old-fashioned but still valid notion, with which I think we can all agree, that insight into school problems helps to qualify us architects for this highly important kind of work.

If, in this informal talk, I am caught borrowing words from the schoolman's language, please bear in mind that I am only feeling my way toward the insight, or understanding, and am not presuming upon the educator's role. I have a deep and sincere respect for the modern schoolman, and for the complex problems — administrative, pedagogical, and financial — which he must meet. And as for school buildings, it is he after all who must plan them first in ideas, and supply all the indispensable technical groundwork, before the architect can begin his materially creative work. On the other hand, it seems clearly the architect's job to meet the educator at least halfway, and to understand his angles of approach in order to visualize and realize his ideals.

I must pause to clarify the use of a few words. Let us call the lower three grades "primary" and the higher three grades "elementary," while calling the six grades in their entirety the "elementary school." The "kindergarten-primary" grouping will not concern us just now.

We seem to be witnessing, in the elementary-school field, a shifting of emphasis which in its way is almost dramatic. Let us look at it first in terms of building cost. At the apex of the public-school system the "senior high school" has long since become the wonder of the American school world. And we have paid for it handsomely from our tax resources. Just lower, the "intermediate" grades of yesterday have become the "junior high school" of today, with much of the parent school's lavish plant and equipment. At the bottom of the scale the kindergarten, while modest in enrollment, has claimed from the beginning a much more expansive — and expensive — layout than has been accorded to the adjacent primary grades. In roughly comparative figures, the senior-high-school building has cost us around \$600 per pupil; the junior high school, \$500; the kindergarten, \$350; while all this time we have been spending only about \$250 per pupil for buildings for the primary and elementary grades. If this indicates, as it may, a lopsided educational development, it would seem a happy issue that the housing of these six Cinderella grades should now re-



A primary classroom in the Walter Hays School, Palo Alto, California. The distribution of light in this room is practically perfect. Even in the warmest weather there is ample movement of air to keep the room comfortable for serious work.

ceive more generous attention. And the "activity" classroom seems definitely a stride in this direction.

On the pedagogic side of this development I can only hazard the impressions of an interested parent and amateur. The point of departure here seems to be the "traditional" or old-fashioned school with its usually "formal, academic, and uninspiring" course of studies — to borrow a severely critical phrase — while the newer objective, reaching forward, is nothing less than a complete, well-balanced curricular implement of the currently accepted educational philosophy. The corrective leaven, of course, appeared ages ago, and with us seems to have been working at least from the remote days of Susan Blow and the first public kindergarten, for the kindly Froebelian influence then promoted could not long be withheld from the next-door primary grades. Being no historian, I make no excuse for skipping decades of slow development from that time to John Dewey and his creative philosophy, marking a new and scientific interpretation of the historic reformers and ushering in the widespread "progressive" movement which is with us today. Some of the fruits of this movement are to be found in the curriculums of many of our public elementary schools. Emphasizing self-activity as contrasted with passive receptivity, they are known collectively as the "activity program." I am informed by the California State Department

of Education that this program is being carried on, in one form or another, in about 75 per cent of the elementary schools of California. Allowing for inevitable handicaps and consequent halfway performances, this is still quite an impressive showing — at any rate it cannot be ignored. Some even say that the degree of departure from the old formal curriculum is the real measure of our collective enlightenment. This seems too severe an indictment, yet it is nonetheless "up to" us to study the motives and ideals of this interesting movement.

What is the essence of this "activity program"? We architects should grasp what the words signify, if we are to provide real "activity" schoolhousing. For this purpose there is nothing better than the old combination of precept and example. Let us study first, then, California theory and practice, then visit a variety of activity classrooms in action. As anyone may see, the most striking change from older methods is to give the children initiative and freedom of movement and to provide them with really creative and self-educative work. As Dewey pointed out, the child who passively listens and reads about things will not develop so fully or harmoniously as one who actually grapples with them in some creative phase. In the process, the widened acquaintance with materials has itself a definite educational value. "Learn better by living and doing" seems to be the idea in a nutshell. A few of our California

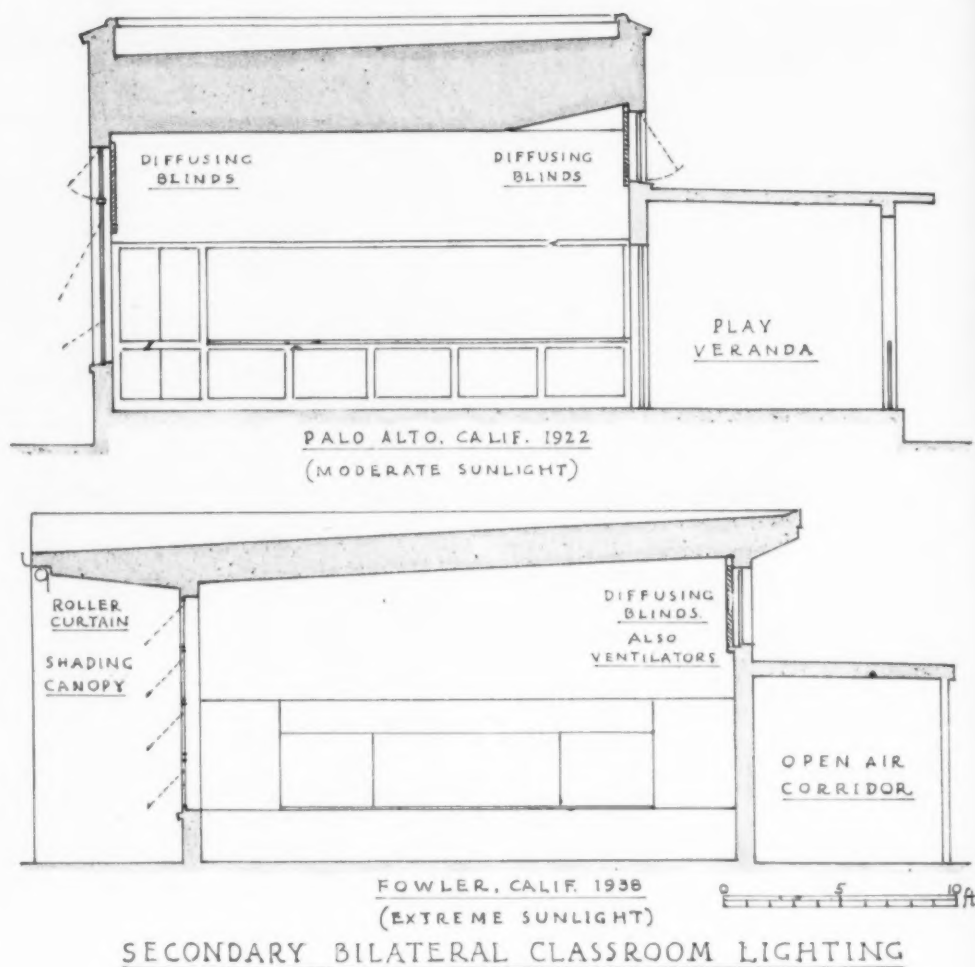
¹Architect, Palo Alto, Calif.

educators, I believe, have favored departmentized instruction in the elementary grades. This may be advantageous in some cases, for the more advanced pupils, but the activity program, as I see it, creates its own internal functional departments, to whatever extent the immediate purpose or project may require. The variety of these pursuits is practically boundless; they are organized usually about broad study units such as food, shelter, clothing, transportation, the local environments. The children's interest is practically self-maintained. Their projects spread, ramify, and interlock as in real life, and emerge in unpredictable and instructive combinations. And at every step opportunity offers for effective integration with the fundamental and jealously guarded "three R's." This is a long, long way from an adequate view of the method and philosophy involved, but it may help the layman to realize what significant changes have been taking place.

To resume: Do not overlook the characteristics of the successive age levels of the children, for they cover a long span of growth and development — the longest, in fact, in the whole school system. The first grade borders upon babyhood, the sixth approaches adolescence. Be ready to follow the educator's distinctions, for there are important differences in the balance of work, play, rest and nutrition, supervision and programs, and only the real educator is qualified to recognize them in practical application. Planning for children is no child's play. All in all, and granted the educator's full cooperation, where is there a finer challenge for architectural creation?

Well, let us presume to accept this challenge and try to visualize what an activity environment should be. To begin with, of course, it should offer all those sound structural, hygienic, and aesthetic qualities and appropriate atmosphere which schools of all classes should possess, especially of these lower grades. Its "standards" should be genuine, their logic alive with meaning, every yardstick true. Of these, the fundamental values are hygienic; let us dispose of them briefly first.

a) *Heating and Ventilation.* This is too large a subject to cover here and now. In a sense, it is more or less a local problem. Our large metropolitan schools have elaborate mechanical systems which theoretically answer every need. For our more modest provincial buildings we seem to rely mostly upon natural window ventilation in combination with various sources of heat, direct and indirect, and including electricity. The hygienic ideal is not approached by any of these systems. What we would like for childhood activity is artificial sunshine from warmed ceilings, floors and walls, plus fresh, invigorating air at the child's heat-radiating and breathing plane — in other words, not merely air conditioning, so called, but an indoor climate of an outdoor June morning. This is not beyond the practicable reach of science. In fact, it has been approached long since in England under the name of



SECONDARY BILATERAL CLASSROOM LIGHTING

Cross sections of typical classroom arrangements for moderate and extreme sunlight.

"hot-panel" or "radiant" heating. So far as I know, its only use for school buildings has been in that progressive land. It is especially adapted to mild climates.

b) *Lighting and Vision.* Lighting standards, so called, have never achieved ideal natural lighting in classrooms. Often poor orientation is to blame, for overlighting and glare near the windows, being shaded down, almost invariably produces underlit "gloom areas" along the corridor wall. Windows may be of standard height, yet the most valuable upper zone may be robbed of sky exposure by deep reveals or projecting cornices. A more effective way is to avoid poor orientation in the first place, then to reinforce the conventional one-side lighting with a group of diffusing transoms set high up in the corridor wall. The inner part of the room will thus receive ample total illumination, while at the same time the predominant left-side direction will be maintained. Venetian blinds over these transoms, by the way, will promote diffusion of air as well as of light.

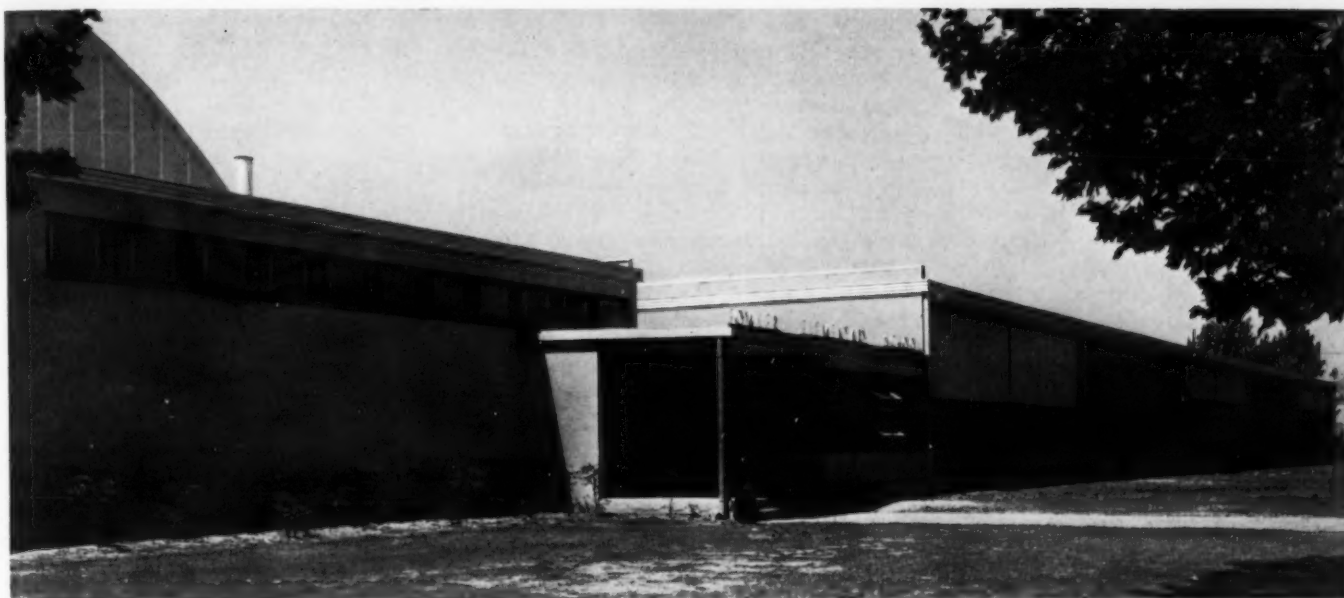
This modified or secondary bilateral lighting, of course, is practicable only in one-story schools. However, since most of California elementary schools are of this type, there is no lack of opportunity to apply it. The Walter Hays School at Palo Alto, built in 1922, is an early — and still quite unusual — example. The school at Fowler is a logical, thoroughgoing, and recent one. Sections of the classrooms of

these schools are shown for comparison. Where natural bilateral lighting is not practicable, recourse may be had to zoned artificial lighting and photoelectric control.

A word should be ventured as to the prevalent use of venetian blinds. These are an excellent corrective of glare and beam leakage, but, like most good things, can be carried too far. With ordinarily fair orientation, and the usual awning-type windows, it should not be necessary to have these blinds descend over the entire lower sashes, but a clear view zone (even if narrow) could doubtless be left near the children's eye level. Experiments along this line are in order. Shutting off the view limits the recreation of the eye muscles and gives a "closed-in" effect which to many is depressing. I have heard it remarked that shaded windows compel concentration; but a school program which needs this kind of aid is itself in need of pedagogic repair.

The most useful place for venetian blinds is over the upper sashes and transoms, where they are near the ceiling and hence admirably placed to promote diffusion. As to the doors, let them all be glazed down to the floor, to diversify the view and lengthen the range of vision.

c) *Contagion.* Here are a few further points as to which reasonable caution should be observed. Tables at which children are seated on both sides should be wide enough to minimize possible conta-



General Exterior View, Fowler Elementary School, Fowler, California.—Franklin & Kump, Jr., Architects, Fresno, California.

gion. However, one need not be too exacting as to this point, for groups of all kinds are formed anyhow, and especially where furniture is movable and the floor space flexible. While this same danger of contagion may be remote in a coatroom, there is a tendency to compress this space unduly and leave little or no ventilation between garments. This makes neatness impossible too. Let there be careful moderation here.

It seems to be accepted that the coatroom, at least for the primary grades, should be open upon the classroom and under the teacher's direct control.

d) *Toilets.* It is common to provide a small double toilet room for the kindergarten, directly accessible and easily supervised. Unfortunately, it is also not uncommon to send first-grade children, just out of kindergarten, long distances to the

general toilet rooms of the school. The kindergarten-primary combination meets the situation; but where this does not exist it would seem logical to treat the primary group as a unit, with its toilets convenient to separate entrance and playground.

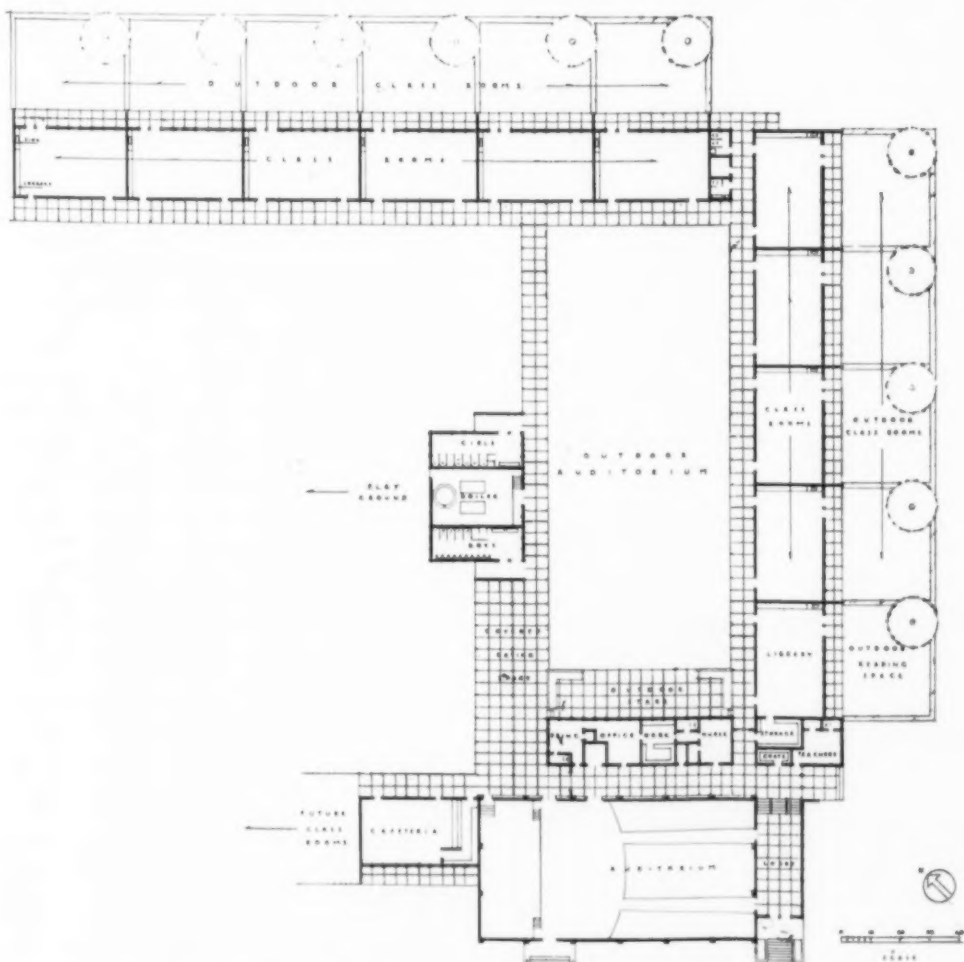
No doubt I have tried your patience with these preliminary hygienic details, important as they may be, so I will continue directly with others which are more especially a part of the activity program. The purpose, of course, is to find out what new utilities and spaces will be wanted, beyond what are usual in the traditional school. We can count at least three kinds of creative work engaged in which bring unusual or more or less intensified demands:

1. Benchwork, mostly carpentry.
2. Art work, mostly graphic and plastic.
3. Group projects of large scale.

Each of these calls for its appropriate equipment. In discussing this and other requirements I shall borrow here and there from the California "Teacher's Guide."

e) *Equipment.* The working equipment required for these activities, while not great in quantity, is of considerable variety—workbenches, tables, sawhorses; tools, tool truck, and racks; sink and electric plate; supply spaces for lumber and scraps; drawers for large tagboard, plain and colored papers, paints, brushes, paste, and a host of other items. There are several interesting lists extant, giving the experts' estimates of the tools and equipment needed, and the monthly requirements of all kinds of materials. One has no less than 46 items. These lists are impressive, some of them seem extravagant; but they form an invaluable preliminary guide to the kinds and amounts of space to be provided. However, there is nothing so helpful for this purpose as the personal study of actual examples. As we shall see, all of this "active" equipment is naturally located at one end of the room, more often in an alcove or similar space.

In addition to this more dynamic material, the well-fitted activity room usually



Floor Plan, Fowler Elementary School, Fowler, California.—Franklin & Kump, Jr., Architects, Fresno, California.

has a sedentary book corner with ample low shelving, perhaps a music center, perhaps also a cabinet or two for exhibits and natural-history specimens. The music center usually means only a convenient place where a phonograph or piano can be wheeled in for special occasions. If a rolling projection screen is contemplated, proper wall space, of course, should be made available.

No list of school equipment can omit blackboards and tackboards. While blackboards seem to have receded in pedagogic favor, the least that can be said about tackboards is that they provide indispensable exhibit space, and that no teacher has ever acknowledged an adequate supply. Important as they are in the traditional school, they are all the more so in the activity classroom. They should receive more than casual attention. An interesting innovation in this field will be noticed later.

f) *Space and Flexibility.* The traditional classroom is an overdone development in space economy, and is barely large enough for its geometric lines of desks. Once more the elementary school suffers by comparison: The aggregate space per child is little more than half of what is provided in the high school. Making all due allowances, there is considerable room for readjustment here. And space itself is not the only need. We have noticed how varied are the projects undertaken and how they merge and interlock with each other. Consequently, the demands for floor space are constantly changing, so that the utmost of flexibility should be attained. This means, for one thing, that structured subdivision in rooms should be avoided.

Some suggest, in a broader sense, that the classrooms should themselves be made reducible in length, to facilitate future changes. Thus, two large activity rooms might be subdivided into three of the present standard size. The advisability of such a prearrangement would depend upon what sacrifices might be involved meanwhile, also upon the present worth of the hope it seems to embody for smaller classes. Still, it can be done. Nothing being more certain than change, structural flexibility—within reason—must be considered a major objective.

One of the most space-consuming features of the activity program is the large-scale group project, usually taking the form of a dollhouse, model village, industrial plant, or other more or less ambitious creation. Sometimes the whole end of the classroom is appropriated. Sometimes part of the work overflows out into the corridors. Movable furniture, at any rate, definitely requires more floor area per pupil.

g) *Seating.* One can easily see what happens when the seating comes in conflict with these active space-consuming projects. Something has to give way. That is one good reason why the furniture should be movable—and why, to be easily movable, it must be in small units such as separate tables and chairs. This is especially important where outside terraces are

available. Oftentimes the chairs only are in use. The small tables and chairs not only permit the most flexible combinations, according to need, but their informality lends a certain homeliness to the scene.

h) *Childhood Scale.* This is a universally desirable quality in school design, but it has a special importance in the activity classroom, where so many operations are related to the height and reach of the child. It is interesting to observe that this "scale" changes very gradually during the three primary years—on the average, by only one inch per year of the children's height—while during the three following elementary years this rate of growth is nearly doubled. Let us remember, then, that this classroom and everything in it is for children, not adults. "Sit on the floor, look around and be governed accordingly," is the admonition to us adults. Furniture, blackboards, tackboards, all should conform to the child's working level and angle of vision. Keep windows low enough for them to see out of—this humane precept is very often disregarded. Shelving, coat hooks, sink, pictures, and everything else should follow the same rule. This scale has much to do with tackboards and blackboards. If a child's reach is only 10 per cent greater than his height, as appears from approximate measurements, then the current practice fixes the top of the blackboard much too high and thus unnecessarily reduces the tackboard above it. This is on the assumption that the teacher's blackboard, if any, has been placed elsewhere. A general checkup of these standards should be made as a preliminary to authentic classroom design.

The application of this "scale" to working and supply equipment is also clear. Since the child's full and free access seems inherent to the program, and his reach is only about four feet from the floor, it follows that this lower zone must contain all the varied equipment that his activities require—every tool, utensil, and piece of material that he needs in his work. Logically, on the other hand, nothing whatever need be provided above this four-foot level, except for general storage, decorative purposes, and the convenience of the teacher.

i) *Aesthetic Quality.* Along with the juvenile scale appropriate to childhood we naturally look nowadays for appropriate feeling in design. Gone is the drab atmosphere of our own school memories: Authorities on child development are eloquent now in their appeals for beauty in the classroom. Like childhood scale, this has widespread application, but in the activity classroom the possibilities of beauty are greatly increased by the greater endowment of significant features. How to achieve it lies both in the realm of general design and the field of color. Some would start by asking for "homelike charm." This is not easy to attain, for the preponderant space is above the juvenile level and necessarily beyond the domestic scale. On the other hand, it must be confessed that architects have been slow to

surmount the old-fashioned conventions which have kept the classroom the rather sober, nondescript place it is. Hospital sanitation is uncalled for in the classroom, yet the modern trend toward plane surfaces and simple composition is helpful both in sanitation and in design. There are many modern materials and devices which may be wisely utilized for their own merits as well as to add interest and variety. Linoleum, plywood, acoustical materials are handy examples, with delightful possibilities of surface design, texture, and color. And new ways appear in which the bare, commercial atmosphere of the classroom can be agreeably domesticated.

The realm of color in classroom decoration is still more inviting. We are only beginning to realize the emotional potentialities of color and to enlist it in the creation of classroom atmosphere. A judicious mixture in the paint pot will avoid dullness and evoke happiness and cheer. And what a tempting palette we have in the bright colors, not only of pigments but also of all kinds of manufactured materials and devices! However, there is some danger in high extremes of color as well as of dullness in the low, for they may easily become monotonous unless used with discretion. Children delight in strong colors, but such colors are better confined to small areas and to their own more or less temporary productions. The schoolroom, after all, should remain a pleasant background for the children and their work.

Further possibilities lie in the variations of color schemes as a whole. Having arrived at an effective combination for woodwork, walls, and other surfaces, it is by no means necessary to repeat it monotonously in classroom after classroom. The higher the color key the more monotonous the repetition will be. Variation, on the other hand, will give to each room its distinctive atmosphere, making it more definitely the home, as it were, of the children of that grade. Window exposure, age level, and possibly other conditions would doubtless influence the choice of appropriate color schemes. Thus a procession of color harmonies through the grades. And why not?—It was achieved modestly in the Walter Hays School in Palo Alto in 1922. For the first time in California since then, so far as I know, it was repeated in Sacramento last year, in 1938. And Sacramento, by the way, claims to be the pioneer!—the idea, however, has doubtless appeared elsewhere.

As we have been talking over these desirable features and qualities of the activity classroom, it has doubtless become more and more clearly visualized, its vivacious method more reasonable and natural to the questioning mind. At least, that was my experience. Although tolerant, however, I still had serious misgivings, as I find others have. For how could carpentry, only short of an anvil chorus, fit in with the hushed, studious atmosphere of a school? Not only noise, but pervading dirt, seemed to make the thing highly impractical.

(To be concluded)



The Ponca City Junior High School, Ponca City, Oklahoma, as seen from the street. — Winkler & Reid, Architects, Oklahoma City, Oklahoma.

The Ponca City Junior High School

Earl Sullins and J. Win Payne¹

Ponca City's history and growth is characteristic of Oklahoma's in general. Like a number of other towns in this section of the state, she sprang into being following the opening of the Cherokee strip to settlement in 1893. On the rolling prairies of this former cowmen's paradise and in the heart of the northern Oklahoma Indian reservations, it was her destiny to remain for a number of years a typical "early day" frontier town. But the brief span of intervening years between statehood (1907-14) and the world war brought the "magic touch" of oil to Ponca and soon the prairie village was one of Oklahoma's ten leading cities.

Nothing exemplifies this amazing growth more than the steady advancement of her school system, for it is a far cry indeed from the single small structure that housed a few students less than forty years ago to the present modern plant which includes six elementary schools, one junior high school, and one senior high school, with a total enrollment of more than 4,500 students.

The block on which the new junior-high-school building stands once housed all the grades. In 1911 a gray native-stone building was erected to serve the junior and senior high schools. An addition was made to this structure in 1920. This building became the junior high school when the pres-

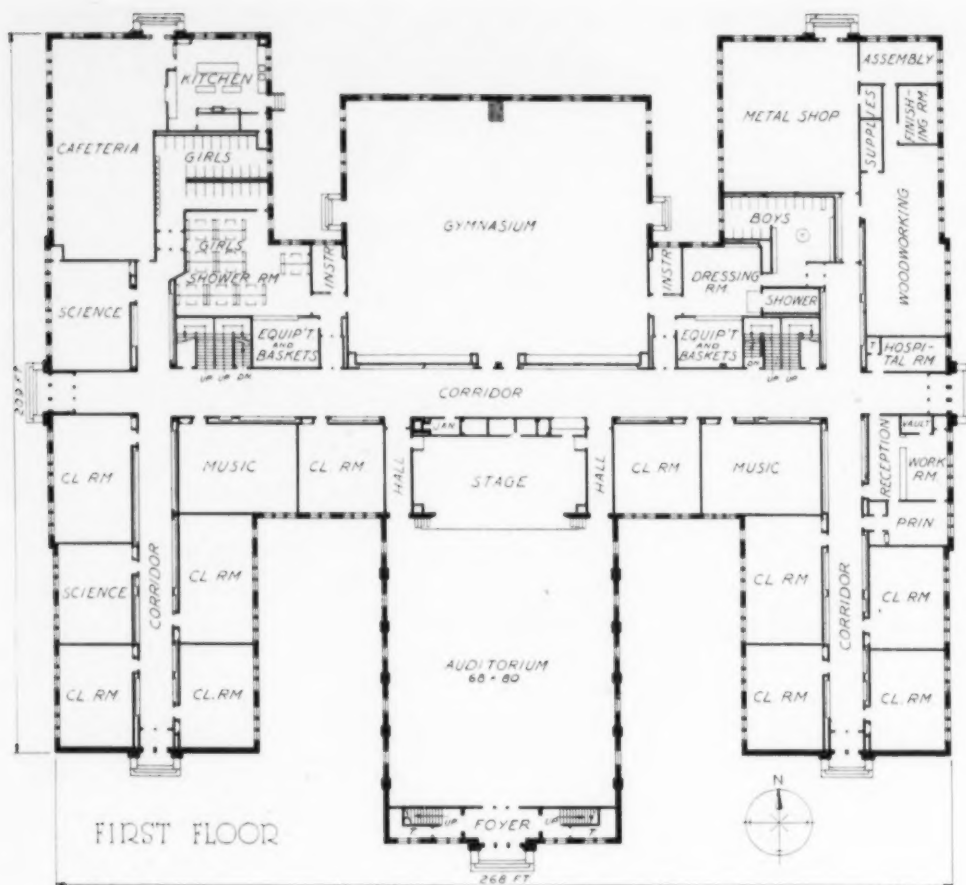
ent high school was completed in 1928. In 1930 a decade-long building program was initiated which came to a climax with the construction of the new junior high school. During this time two isolated units were

added at the high school; viz., an industrial-arts building and a fieldhouse. The separate school and the grade units were all enlarged to care for growth. Much of this was done on the pay-as-you-go basis

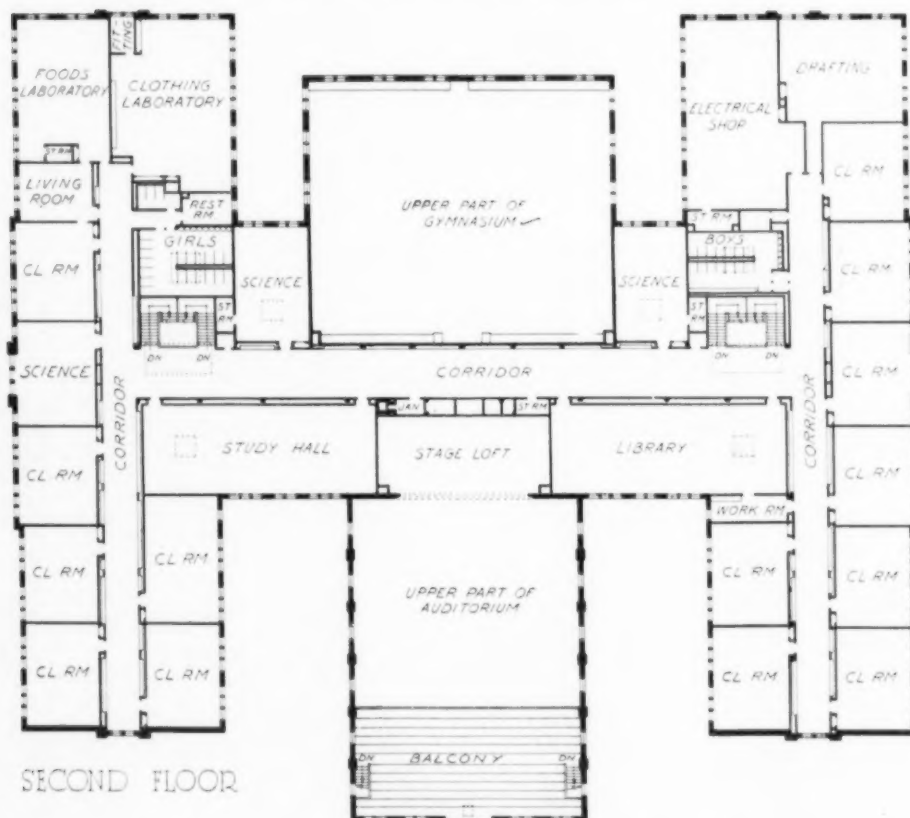


Ample storage space for bicycles is provided adjoining the building on the playground side of the Ponca City Junior High School.

¹Instructors in the Ponca City Junior High School.



First Floor Plan, Junior High School, Ponca City, Oklahoma.—Winkler & Reid, Architects, Oklahoma City, Oklahoma.



Second Floor Plan, Junior High School, Ponca City, Oklahoma.

by resorting to a building levy instead of issuing bonds.

The new building follows the modern trend in architectural design, and the four elevations are treated to be equally attrac-

tive and dignified. Extensive use of ornamental materials has been avoided, beauty and distinction being given by proper use of simplicity and balance. The exterior is of variegated buff brick trimmed with lime-

stone. On large wall areas some decorative work was done to avoid monotony. The six entrances are simple, yet add much to the pleasant dignity of the building.

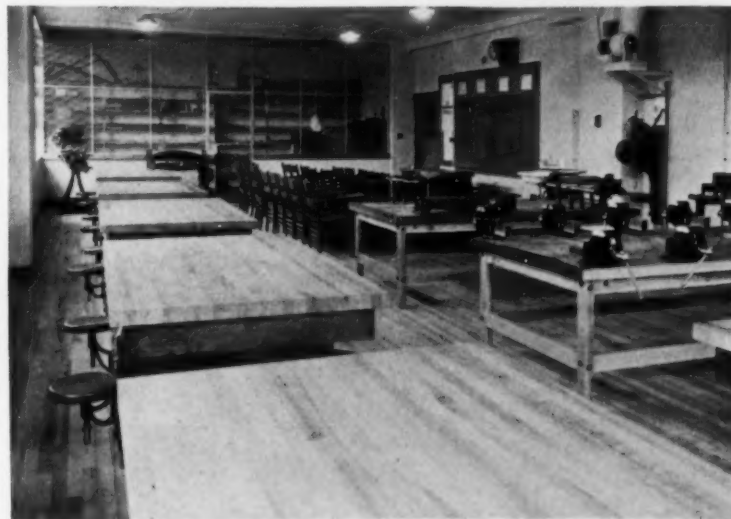
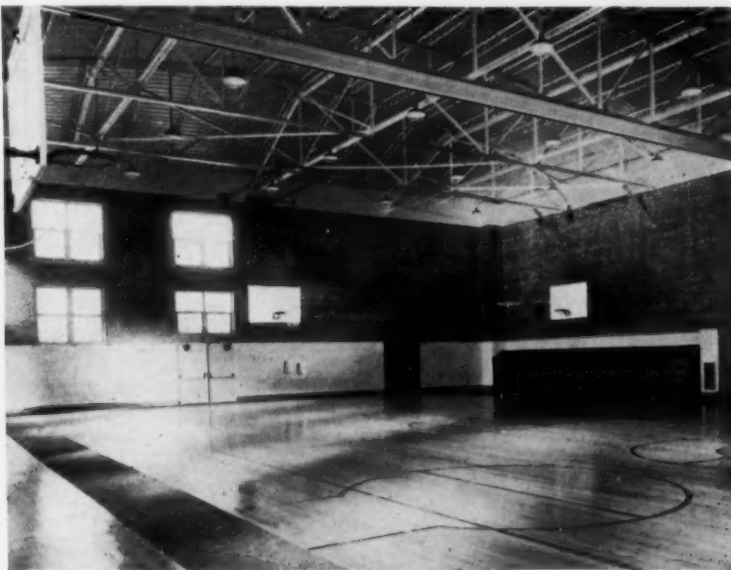
The building has two floors, with an over-all size of 268 feet from east to west and 216 feet from north to south. The arrangement is such that every room has outside light. The general plan consists of three parallel units with a central connecting wing through which runs the main corridor. Extending 268 feet in length this corridor is 14 feet in width and provides ample space for the rapid passing of the school's 1200 students. Like the classrooms in the building, the corridor floors are covered with asphalt tile done in shades of brown. The all-steel lockers with built-in combination locks are recessed into the walls. Electric clocks, working from the master clock in the principal's office, are located at convenient points in the halls. Recessed drinking fountains are provided on both floors.

There are two double-duty stairways in the central wing, and the outside units are provided with one stairway each.

The auditorium lies in the north half of the central unit. It can be completely shut off from the rest of the building. Modern in design, finished in pastel colors, with artistic drapes and chromium-plated lighting fixtures, this auditorium has true distinction. The seating arrangement gives an unobstructed view of the stage from each of the 1400 seats. The acoustics are perfect. The large stage is complete with front, proscenium, cyclorama, and concert curtains, as well as a full set of plastic interior and exterior scenery. The colorful lighting effects add much to its beauty.

The south half of the central unit houses the gymnasium. This room may be divided by an electrically controlled folding door, weighing approximately two tons and having an asbestos core for soundproofing, to provide two divisions for boys' and girls' physical-education classes. Running longitudinally is a standard exhibition court for basketball, bordered on either side with spectators' stands of the telescopic recessed type having five movable rows capable of accommodating 800 persons. From the standpoint of economy and sanitation the gymnasium is unexcelled. Every square foot is subject to constant, active use. The entire physical-education department, other than the maple playing-floor space, features terrazzo floor, and the lower half walls are of light bluff glazed tile. The courts have the benefit of direct sunlight from three sides.

The administrative offices are located on the ground floor of the west unit. The principal's office has a microphonic type of public-address system with a talk-back feature which reaches to one or all locations in the building. This sound unit has a phonographic connection and is also radio equipped. The four-circuit clock and bell system is also located here. The registrar's office has a large steel vault with built-in filing cabinets, walnut desks and chairs,



The rooms and larger instructional areas of the Ponca City Junior High School are planned and equipped for service under a progressive type of activity program. Top left: a general science room. Top right: a view of the gymnasium with folding bleachers. Middle left: the industrial arts laboratory is equipped both for practical shop work and for demonstration and lecture work. Middle right: a general shop showing the metal working and with the demonstration and lecture corner. Bottom left: the cooking laboratory is generously planned with unit kitchens. Bottom right: the cafeteria has metal furniture of the most permanent type.

and a bell system with which to signal the individual rooms.

Each of the science rooms is equipped with eighteen tables, accommodating two pupils each, and a demonstration desk. All 31 academic classrooms have as standard

equipment slate blackboards on three sides of the rooms, 35 students' desks each, a teacher's desk, built-in supply cabinets, and a bulletin board. The average size of these rooms is 25 feet by 30 feet. The walls of the outside rooms are tinted light green,

and those of the inside rooms are peach color. The ceilings are of a fireproof, sound-deadening composition board.

The home-economics department is located on the second floor at the south end of the east unit. The foods department



The modernistic design of the building is carried into the auditorium with especially attractive results. The room has entrances so placed that it serves for the general public as well as the school.



A well furnished library with a sound absorbing ceiling and a quiet floor is the nerve center of the academic unit of the Ponca City Junior High School.

consists of a laundry unit, a special dining room, built-in storage space, and four complete unit kitchens. Each unit contains a stove, an electric icebox, a sink and cabinet, an electric towel drier, and a maple dinette set for six girls. The clothing department is equipped with glass display cases, a fitting room, built-in ironing boards, 10 sewing machines of which four are electric, and 10 sewing tables with built-in individual lockers accommodating four girls each. A separate classroom is provided for theory work.

The four shops are located in the south

part of the west wing of the building. The modern woodwork shop accommodates 30 boys, and is fully equipped with individual hand tools, power machinery, finishing and toolrooms, storage cabinets and glass-fronted display case for projects. Large and well lighted, the electric shop has a capacity of 32 pupils. Each of its tables is equipped with hand tools and is wired with both 110- and 6-volt outlets. Ample storage space, a demonstration desk, a lavatory, and a lecture space completes this model shop. Complete in every detail, the drawing room is provided with raised black-

boards, new drawing tables with adjustable stools attached, a teacher's desk, storage cabinets, and two large display boards. The well-planned metal shop seats 28 students at its seven tables. Each table is equipped with four sets of hand tools and four adjustable, revolving stools. A screened-in supply room, a teacher's desk, a lecture space, and power machinery makes this an ideal shop.

Located on the second floor of the central unit this large and well-lighted room seats 78 pupils at its thirteen solid oak tables. The shelving capacity is 7000 volumes. Other features are vertical files for pictures and pamphlets, a book repair room, a catalog file, and a charging desk.

The cafeteria with its terrazzo floor is 72 feet long and varies in width from 30 feet to 40 feet and has a seating capacity of 200. Included in its electrical equipment are a multiple mixer, an icebox, and a dishwasher. The new steam table and other equipment are specially designed for school cafeteria use.

The music department includes two choral rooms, each 30 feet by 40 feet, and instrumental and band rooms. The latter are located in the city school administration building which is just across the street, north of the new building. An all-weather passageway is provided by a 500-foot tunnel under the street. This isolates the department, eliminating the disturbance of academic classwork.

The problem of toilet facilities has been carefully studied for the convenience of students and the public, and for economy in operations and maintenance. Toilet rooms are located at the intersections of the main and secondary corridors on both the first and second floors. They are also located adjoining the cafeteria, the gymnasium, the shops, and the home-economics departments. Each toilet has terrazzo floors and glazed-tile walls. Ventilation is by means of exhaust fans, and the lavatories are the wall type with an automatic turn off feature. Janitors' supply rooms are provided on each floor. Outdoor bicycle racks accommodate two hundred bicycles.

The heating system is winter air conditioned, and the air to all rooms is filtered and humidified. It is of the forced-draft circulation type. The temperature of each room is automatically controlled by thermostats. Steam for heating is supplied by two steel boilers equipped with automatic-feed stokers.

The educational planning of the building was under the direction of the superintendent of schools, Mr. Charles P. Howell, of the junior-high-school principal, Mr. Ralph Lester, and of the heads of the various departments. The building was planned and designed by Winkler and Reid, architects, of Oklahoma City, Okla.

Construction was begun in December, 1937, and occupancy followed in January, 1939. The total cost with equipment was \$441,216.43, of which PWA provided 45 per cent. The cost per pupil was less than \$400.

Uniform Standards for School Buses

M. C. S. Noble, Jr.¹ and Frank W. Cyr²

The problem of safe, well-built school buses is just as serious today as the problem of safe school buildings was thirty years ago. Prior to 1939 there was no organized demand for national and uniform school-bus standards. In 1938 one third of the states were still without state-wide standards, but, in the remaining two thirds of the states, state-wide standards had either been recommended or were actually being enforced by some state agency. As might be expected, the establishment of national and uniform standards in 1939 was not due to any single cause, but rather to a number of related causes which, when viewed as a whole, presented a general need for such standards. Prominent among the causes which led to the establishment of national standards were:

1. The rapid increase in the number of school buses in the United States. During the period 1926-1938, the number of buses increased from 32,778 to 86,099 buses, an increase of 132 per cent.

2. The large number of school buses being purchased annually. In 1938, 11,272 new buses were purchased from manufacturers. At an estimated cost of \$2,000 per bus, the number of new buses purchased in 1938 represented an investment of \$22,554,000.

3. States which had not adopted school-bus standards felt the need for such standards, and many states which had already adopted standards realized that their standards needed revision.

4. All of the states were aware of the fact that the lack of agreement as to bus standards—both among the states and in some instances within a single state—had not only been productive of confusion, but had also forced the manufacturers to approximate custom-built jobs which prevented the schools from reaping the economies inherent to volume production.

During the past few years the need for uniform standards has rapidly become more pressing. In 1939, active support for the establishment of national and uniform bus standards came from five sources. Teachers College, through its national survey of pupil transportation, had collected sufficient data to demonstrate the need for such standards and to propose a tentative list of standards. The National Council of Chief State School Officers, through its president, Dr. H. E. Hendrix, requested the pupil-transportation survey staff of Teachers College to present its findings to the Council, and on the basis of these findings the Council, at its annual meeting in Cleveland, adopted the proposal that each state department of education be invited to send authorized representatives to a national conference on school-bus standards. The 48 state departments of education readily accepted this invitation. The manufacturers of school buses promptly agreed to participate in the proceedings to the extent of supplying trained engineers who would be available to furnish such technical advice as might be necessary to

expedite the work of the conference. And, the General Education Board generously provided a grant of \$5,000 to pay the major expenses of each state department representative.

The National Conference on School Bus Standards was held at Teachers College, Columbia University, during the week of April 10 to 16. Each of the 48 state departments of education and the United States Office of Indian Affairs sent an authorized representative; these 49 representatives constituted the voting membership of the Conference. The nonvoting members

Characteristics of an Acceptable Standard³

1. State regulations governing school-bus construction should be set up to insure *safe and economical* vehicles.

a) *Safety* means the safe conduct of pupils to and from school. It includes the time the pupil is on the bus, and the time consumed in entering or leaving the bus. It refers to both major and minor accidents and the prevention of accidents. It also refers to the health of the pupils as affected by bus construction.

b) *Economy* means the construction, procurement, operation, and maintenance of school buses at the lowest possible cost of pupil transportation consistent with safety.

2. The primary function of uniform state regulations is to specify the *result desired* in terms of safety and economy. The methods of achieving the result desired must be defined insofar as this is necessary in order to make enforceable regulations.

3. Uniform state regulations should:

a) Provide minimum standards, and

b) Specify exact special dimensions insofar as this will further efficient volume production.

4. Uniform state regulations should:

a) Eliminate the procurement of unsafe buses, and

b) Eliminate conflicting standards among states since such conflicts increase the costs of production.

5. States may make adaptations to the minimum uniform standards insofar as this will permit desirable adaptation to local needs; provided, these adaptations:

a) Do not conflict with uniform standards, or

b) Otherwise unduly increase the cost of production.

6. Uniform state standards should provide limits within which sound construction is possible, thus permitting the degree of flexibility which is necessary to accommodate the various manufacturers. The designing of safe buses in accordance with state requirements is a responsibility of the manufacturers.

7. Uniform state standards should permit the widest possible opportunity for the development and use of such new inventions and improvements as is consistent with the formulation of enforceable regulations.

8. Uniform state regulations should be subject to annual review, and revision when necessary, through cooperation of state departments of education.

of the Conference included one representative from the United States Office of Education, one representative from the National Education Association, two representatives from the United States Bureau of Standards, and thirty-three representa-

tives from companies that are actively engaged in the manufacture of school buses. The outstanding achievements of the Conference were: (a) an agreement as to the characteristics of an acceptable school-bus standard; (b) the adoption of standards governing school-bus chassis, school-bus bodies and school-bus equipment; and (c) the publication of an official report which not only described the work of the Conference, but also set forth the necessary procedures for putting the standards into effect.

Characteristics of Acceptable Standards

To facilitate the adoption of practical standards, the Conference devoted its opening sessions to a consideration of the underlying principles which should govern the formulation of each standard. Accordingly, the accompanying list of characteristics of an acceptable standard was agreed upon and each standard, before its adoption, was carefully evaluated to see if it possessed *all* of the acceptable characteristics.

Chassis Standards

The Conference adopted standards covering seventeen items of chassis construction, these items being: Axle, battery, brakes, bumpers, exhaust pipe, frame, gasoline tank, generator, governor, guards, over-all length, power of grade ability, speedometer, steering gear, tires, and weight distribution.⁴ In the opinion of the Conference, each standard, together with its subdivisions, possesses all of the acceptable characteristics previously listed in this article.

Of equal significance to the chassis standards which were adopted were the viewpoints which developed during the discussions. In the first place, the state department representatives were unanimously of the opinion that: (a) the chassis manufacturers should be required to furnish uniform and certified ratings to the forty-eight state departments of education covering prescribed chassis parts; and (b) such ratings should be supplied on the uniform report forms developed by the Conference. An example of this point of view is found in the following standard which relates to the front and rear axles:

a) *Front axle*: Shall have a gross weight rating at the ground according to the chassis manufacturer's rating, equal to or exceeding that portion of the total load which is supported by the front axle. The chassis manufacturer's rating shall be furnished by the chassis manufacturer to all state departments of education.

b) *Rear axle*: Shall be of full-floating type and have a gross weight rating at the ground according to the chassis manufacturer's rating, equal to or exceeding that portion of the total load which is supported by the rear axle. The chassis manufacturer's rating shall be furnished by the chassis manufacturer to the state departments of education.⁵

⁴*Op. cit.*

⁵*Op. cit.*, p. 11.

¹Director, Pupil Transportation Survey, Teachers College, Columbia University.

²Associate Professor of Education, Teachers College, Columbia University.

³"Minimum Standards for School Buses" (developed and approved by the representatives of the forty-eight state departments of education), pp. 8, 9. (Scranton, Pa.: International Textbook Company, 1939.)

In the second place, the state department representatives were insistent that any modifications of certain fundamental items of chassis structure should be subject to the guarantee of the manufacturer. Thus, the standard regarding chassis frames reads as follows:

a) Each frame side member should be of one piece construction. If the frame side members are extended, such extension shall be designed and furnished by the chassis manufacturer with his guarantee, and the installation shall be made by either the chassis or the body manufacturer and guaranteed by the company making the installation. Extensions of frame lengths are permissible only when such alterations are behind the rear hanger of the rear spring.

b) No additional holes not provided in the original chassis frame shall be permitted in the top flanges of the frame side rails. There shall be no welding to the frame side rails except by the chassis manufacturer.⁶

In the third place, the state department representatives were insistent that no chassis standard should be adopted which required changes in wheel bases on chassis which have proven both safe and economical. Concrete evidence of this attitude is revealed in the permission for frame extensions which occurs in the frame standard which has already been presented. This point of view prevailed because it was realized that changes in existing wheel bases would mean either expensive changes in the present production lines of chassis manufacturers or prevention of the use of chassis developed under methods of volume production.

Body Standards

The twenty-six standards governing school-bus bodies, as adopted by the Conference, were also designed to promote safety and economy. These standards cover the following items: Aisles, body sizes, ceiling, construction, doors, fire extinguishers, first-aid kit, floor, identification, inside height, lights, mounting, overhang, posts, rear-vision mirrors, rub rail, seats, speedometer, steps, tools, ventilators, wheel clearance, width of body, windshield and windows, and wiring — *plus* such optional equipment as skid chains, defrosters, and heaters.

In developing standards for school-bus bodies, the Conference paved the way toward real volume production when it: (a) adopted the conventional type of bus body as the standard model to be employed when the estimated pupil load — on the basis of forward facing seats with 27-inch seat centers — includes more than 24 pupils and less than 55 pupils; (b) standardized in terms of special dimensions; (c) adopted such salient provisions as all-metal construction, a uniform school-bus color, and safety glass; and (d) prescribed that adaptations of the adopted standards are necessary in the case of such smaller type vehicles as panel conversions or suburban models.

The adoption of the conventional type of bus body as the standard to be employed when the estimated pupil load — on the basis of forward facing seats, an aisle

width of 12 inches, an average rump width of 13 inches, 27-inch seat centers, and a 6-inch allowance for side wall thickness — includes more than 24 or less than 55 pupils was effected because the members of the Conference recognized: (a) Over-all vehicle lengths in excess of 33 feet are not only contrary to existing statutes in a majority of the states, but also contrary to safe highway practice. (b) Metropolitan and transit models, by virtue of their greater purchase price, represent an additional cost in which the schools cannot afford to indulge. (c) Conventional type buses are not only less expensive but also provide safe means of transportation. (d) Panel conversions and suburban models — not "station wagons" — are preferable to buses when the pupil load, on the given bases of estimate are less than 24 pupils.

Conventional models were standardized in terms of *spacial dimensions* in order to: (a) further volume production; and (b) assure the creation of thoroughly neutral standards. In the future, the standard or conventional school-bus body will have a minimum inside height of 66 inches measured at the longitudinal center line, and an outside width of 98 inches. Furthermore, the adopted scale of body sizes is so devised as to limit each body manufacturer to a maximum output of only six body lengths, as follows:

Basic Pupil Load	Range of Body Lengths
24	170-185 in.
30	180-210 in.
36	215-230 in.
42	245-265 in.
48	255-285 in.
54	290-315 in.

Obviously, these standard dimensions will serve to eliminate the high cost of production which prevailed when the manufacturers, under the influence of conflicting standards, were forced to approximate custom-built jobs. And, because these standards center around the concept of spacial dimensions, they are neutral standards in that they exert an identical influence upon the separate companies which manufacture school-bus bodies.

ADMINISTRATOR VERSUS RESEARCH WORKER

An administrator cannot easily be metamorphosed into a researcher. To him it is not a question of "What is true?" but rather "What is expedient?" The procedure and habits of the two attitudes are absolutely polar. It is the business of the research man to keep alert for new facts and never to settle questions, except tentatively. The administrator, on the other hand, must decide matters and finds his proper function in issuing a fiat, even if it afterward develops that his decision was wrong. He may upon occasion accomplish a modicum of research, provided he can keep himself in two pockets as it were, but an administrator qua administrator can no more be reckoned a research man than black can pass for white. — Dr. Frank P. Graves.

Naturally, the limited scope of this article prevents its authors from either listing or evaluating each of the 26 standards which were adopted for bodies of the conventional type. However, as further illustrations of the emphasis which was placed upon safety and economy, it will be well to consider three items in some detail.

First. The standards provide that "construction shall be all-steel construction or construction of other metal with at least a strength equivalent to all-steel construction, as certified by the bus body manufacturer."⁷

Second. All glass used in the windshield, windows, and doors shall be safety glass which has been approved by the laboratories of the National Fire Underwriters.

Third. For purposes of identification, school-bus bodies:

a) Including hood, cowl, and roof, shall be painted a uniform color, *National School Bus Chrome*, according to the United States Bureau of Standards specifications with the exception of fenders and trim.

b) Fenders and trim shall be black.

c) Shall bear the words, SCHOOL BUS, in black letters at least four inches high on both the front and rear of the body.⁸

Although the great majority of the school children, who are transported, travel in conventional models, there are many routes which require smaller type vehicles. For such routes, the Conference favored the use of panel conversions and suburban models. However, the Conference was decidedly of the opinion that the construction and equipment of such smaller type vehicles should conform — except where fundamental differences of design prohibited compliance — with the standards outlined for buses of the conventional type.

Adoption of Standards by the States

Although each state must officially adopt the standards which were adopted by the National Conference on School Bus Standards before these standards can become legally effective within its borders, it may be anticipated that in the near future these standards will be employed throughout the nation. Indeed, in the short period of time which has elapsed since the adjournment of the Conference, a number of the states have legally adopted the Conference's standards. Further assurance that the standards will become official in various states rests in these facts: (a) These standards have already been approved by the authorized representatives of the 48 state departments of education. (b) In majority of the states, the state department of education is the agency which has complete power to determine and enforce standards governing school-bus construction and equipment. (c) Failure of a particular state to adopt the standards will mean that the state will be forced to pay the excessive costs which accompany the purchase of custom-built buses. (d) The standards are intended to apply only to equipment purchased after they have been legally adopted by a state, hence are not retroactive.

⁶Op. cit., p. 14.

⁷Op. cit., p. 19. ⁸Op. cit., p. 23.

How Budgets Should Be Prepared and Followed'

Willard S. Ford²

The focal point in the consideration of all educational problems is the annual budget. The revision of curricular offerings, the extension of auxiliary services, and the provision of plant facilities all come to the budget for final decision. When the Mexican bandit, Pancho Villa, had gained political control in Mexico City, he was heard to remark after a two-hour conference with his cabinet, "But what is the budget?" Many a school administrator feels like Villa. Nevertheless, the effectiveness of good school administration is directly related to the quality of budgetary administration.

Four important issues are presented here concerning the preparation and administration of school budgets:

1. Should budgetary procedure be a democratic process? If so, how? This issue has two supplementary issues: (a) What policies should be considered in preparing the budget and how should they be developed? (b) What functions of budget-making should be performed by the board of education, the superintendent of schools, the business manager, the principals, supervisors, department heads, teachers, and noncertificated employees?

2. What criteria should be set up for the review and revision of budget requests?

3. What is the desirable proportion and what are the proper uses of contingency funds?

4. When and how should the budget be presented to the community?

Democracy and School Policy Making

A Democratic Process. If the teaching of democracy is to be successfully accomplished in the schools, the principles of democracy must be practiced by teachers, principals, supervisors, superintendents, and boards of education. American democracy does not imply that every member of the social group shall participate equally and actively in the formulation and administration of policies. It does, very definitely, imply that those who carry on administrative functions must be selected by a democratic process and must be held responsible for the faithful fulfillment of their obligations. It has a further implication which has been effectively stated by Kilpatrick as "a respect for personality." No administrative officer or teacher has a right to develop a plan for others and tell them to take it or leave it.

Budgetary procedure may and should be a democratic process in that every classifi-

cation of staff members may be represented in determining the needs for housing, equipment, supplies, organization, and services to be financed as these affect their particular service. A committee of art teachers should assist in determining the type of water colors to be used in their classes. A committee of custodians should be active participants in the standardization of floor brushes. Principals, supervisors, and teachers should have a part in determining the standard room layout for a primary grade.

Policies the Basis of Budget Construction. Intelligent budgetary procedure determines the activities and the expenditures for a fiscal period by the formulation of policies relating to every budgetary division. These policies define the nature and the amount of service to be provided, the condition of the service and its payment, the character and amount of supplies, and the equipment and housing which are necessary for a satisfactory performance of the service. It is in this formulation of policies that the democratic procedure has the opportunity to function. Since the teachers' salary schedule is the largest single item of expenditure, it well illustrates the principles as stated. The maintenance of the morale of the staff requires that they have the opportunity to participate in the development of the salary schedule. A representative committee of the teachers, studying all of the obligations, financial ability of the district, and the relation of expenditures for salaries to expenditures for other functions, lays the groundwork for their final acceptance of the salary schedule which is adopted and applied. While there is likely to be difference of opinion concerning the desirable schedule, the fact of participation in its development places upon the committee representing the teachers the responsibility for the defense of the final outcome, which results from the co-operative development of the salary schedule.

The number of policies which must be formulated are innumerable and may be minute in detail. Shall the board of education furnish towels to the students in physical-education classes? Should classroom interiors be refinished once in ten years or once in twenty? Are typewriters to be serviced by the local maintenance organization or replaced every three years by the exchange procedure? The only effective method by which the board of education may be required to assume its responsibility in the determination of budgetary limits is for them to consider and to adopt the pertinent policies relative to the educational practices and the administrative procedures.

The Three Responsible Parties

Budget Functions. While every personnel classification should be represented in the development of the budget, the functions of these representatives are by no means identical. While the function of each group will vary from organization to organization, and while it is difficult to say that one procedure is the best procedure and one division of responsibility is the only correct one, there are certain general principles which are applicable to any organization. The primary responsibility of the board of education is to review, consider, and adopt the policies relating to the budget and to review and adopt the budget itself. The development of the policies should be a continuous process. However, the first activity, so far as the board is concerned, in the development of a new budget, should be the reconsideration of the old policies and the adoption of new ones.

So long as the superintendent of schools is the chief executive officer of a school district, it is his responsibility to initiate the consideration of budget policies, to secure, assemble, and present to the board of education all pertinent data relating to the policies. Under his supervision the budget should be assembled and presented to the board and the public, and he is primarily responsible for its administration.

The business manager, as the personal representative of the superintendent, should carry the responsibility for the administration of the detail of the assembly of the budget and should be responsible for its operation and accounting. It is a natural desire and legitimate one for the business manager to wish to show a budget which gives evidence of economy in administration. A basis for the evaluation of the effectiveness of the service of the business manager is not the number of dollars spent, but the cost in relation to the extent and quality of the service rendered. While he participates in determining the desirable quality through the development of board policies, it is his responsibility to accept the policies developed and to administer the budget in relation to those policies.

The Principal and the Budget

The principal, as chief administrator of a school unit, is necessarily concerned with budgetary procedure. It is his responsibility to direct his staff in the formulation of budget requests, to assemble these requests for his school, and to participate in the formulation of policies related to it. Once the budget has been approved, he should have at hand a statement of the character and amount of the budget available for his unit. It is then his responsibility to so ad-

¹Paper read before Discussion Group C, American Association of School Administrators, Cleveland, Ohio, March 1, 1939.

²Superintendent of Schools, Glendale, Calif.

minister his school that he keeps within the budget limitations that have been fixed. While it is the responsibility of the business manager and the superintendent's office to maintain a fair distribution of materials and services between the schools, the major responsibility for each unit must necessarily rest upon the principal.

What holds true for principals is also applicable to department heads, teachers, and noncertificated employees. It is as important that the principal of the school exercise democratic principles as it is for the superintendent's office. Every user of supplies and materials should be represented in the formulation of the standards for these things. This requires that some place in the organization there must be an administrative officer whose chief responsibility it is to work with standardization committees for the development and the revision of standard lists of supplies and equipment. This is perhaps equal in importance to the necessity of having someone within the organization who is responsible for the leadership of the staff through committees, in the development of courses of study and curriculums for the school program.

Criteria for Revision of the Budget. Every superintendent who follows the method of developing his budget through the assembly of budget requests for the major budget divisions always has a disturbed feeling when these budget requests are brought together and totaled. He knows well the desirability of each request and the urge of every division head, and he is equally well aware that from 10 to 25 per cent of the requests must be denied in the final assembly and approval of the budget. Before this document may be presented to the board of education, someone must carry the responsibility for wielding the blue pencil. The wise superintendent will make this a shared activity, but the sharing it is necessary to set up certain criteria which justify the elimination of certain items and the inclusion of others.

Three Inevitable Criteria

While no attempt has been made to secure the group judgment in the setting up of these criteria, I am suggesting three which I have found helpful in meeting this difficult responsibility, as follows: First, the budget should represent the extent and character of the educational program which the community is able and willing to support. The superintendent who is sensitive to the interests of the community will know the sentiment of the majority concerning school services. Delegations which visit the board to request school additions or object to school expenditures, communications which bring complaints or make suggestions, statements of service-club members and parent-teacher associations, and the reaction to school publications, all aid the superintendent in determining the extent and character of the educational program which the community is able and willing to support.

The second criteria is the relative value of each service, material, or improvement to the conduct of the educational program. This criterion should determine the allocation of the total to the various budgetary divisions and subdivisions. Is it more important to spend fifteen hundred dollars for materials for an art project or is the need for a lath house and greenhouse for landscape gardening more important? Will the needs of the children be better served by the increase of teachers' salaries or by the use of those funds in the construction of additional classrooms? These are the typical comparisons you all make when the maximum expenditure consistent with public policy has been fixed.

The third criterion is the matter of the importance of a given expenditure in a long-term plan. The policies extending over a period of years are safe policies to follow if one would avoid the embarrassment of the fateful day when delayed expenditures have accumulated to the point where they indicate poor administration. One may delay maintenance work for a year or two, but continual delay leads finally to deterioration and breakdown. One may put off the purchase of new textbooks until the point is reached when all the books are too old and worn out and dirty for use. Ordinarily maintenance and capital expenditures for a given fiscal period must be a part of a well-determined plan for a period of years.

Contingency Funds. A well-prepared budget specifies in detail the purposes for which the expenditures are to be made. While it is true that in any fiscal year situations arise which cannot be anticipated, the practice of placing large lump sums under budget divisions with no specification of purpose other than that it may be drawn upon for the particular function until exhausted, is an indication of lack of adequate planning. The size of the contingency fund may be taken as a barometer of the care that has been exercised in budget preparation. A contingency fund is an undistributed reserve set up to meet the extraordinary needs which could not be anticipated. Such contingencies may be placed in each of the major budgetary divisions, or it may be set aside as a separate fund. Such a contingency does not refer to a reserve set up for the subsequent fiscal period and which is nonexpendable during a given budget period. Whenever the fiscal period does not coincide with the taxation period, such a reserve is necessary to meet expenditures until taxes may be collected and are available for use.

Budget Reserves v. Good Planning

The preparation of the budget for maintenance may take the sum used in the preceding year with an addition of 5 to 10 per cent. Such a budget provision is not closely related to need. A careful survey of the plant with the determination of the specific jobs to be performed and an estimate of their cost, not only develops an accurate budget, but also establishes a

work program. A careful estimate of the number of staff required for a fiscal period, based upon accepted pupil-teacher norms and a careful estimate of pupil enrollment, will enable the administration to establish a very close estimate of required expenditures for teachers' salaries. If such care is followed in the determination of each of the required budgetary divisions, the proportion of funds carried as a contingency need not be large. The examination of the budgets for the current year in 23 districts of Los Angeles County, Calif., indicates the current practice in that state. The budgets of these districts ranged from \$221,000 to \$2,618,000. The proportion of funds set up as an undistributed reserve for these districts ranges from .8 to 18.8 per cent. Sixteen of the 23 districts had an undistributed reserve of less than 3 per cent. The median reserve was 2 per cent, the lower quartile 1.4 per cent, and the upper quartile 6.5 per cent. There was an apparent tendency of the smaller districts to maintain a larger proportion of funds in their reserve. Inasmuch as a contingency in a single school would involve a larger proportion of funds in a small district, this tendency is, no doubt, justifiable. The experience of these districts seems to indicate that an undistributed reserve as a contingency fund of 2 or 3 per cent is adequate if the various budget items have been carefully estimated. The data at hand, however, did not indicate the amount of contingency which was placed in each of the budget divisions. Some idea of this may be secured from the unexpended balances at the close of the year. The general reserve set up in these districts to provide required cash for the beginning of the next fiscal period averaged 5.6 per cent in the districts considered. These amounts are considerably less than the cash required and usually carried forward, so that it is entirely probable that the budget divisions carry contingency funds approximately equal to the undistributed reserve. If these assumptions are correct, it appears that it would be a satisfactory policy to carry a total contingency fund amounting to 5 per cent of the budget, which implies that 95 per cent of the anticipated expenditures should be allocated to definite services and projects in the preparation of the budget. A contingency fund should not be used as a substitute for careful budget preparation. It should make possible the financing of essential unanticipated needs and permit the normal functioning of the program without the wasteful delay otherwise required.

The Public and the Budget. It might be a relief to school administrators if annual budgets could be considered confidential material. There would, however, be many dangers in such a policy, and fortunately the statutes of most states not only make the budget available to the public, but require its public presentation. The State of California requires a public hearing before the final budget is adopted. This hearing is ordinarily held between the first and the

fifth of August. On the latter date, the final budget must be submitted to the county superintendent of schools for the calculation of the tax rate preparatory to making the tax levies. Obviously the presentation of the budget at this date is a meaningless gesture, since revision after the hearing is practically impossible. The most important element in presenting a school budget to the public is to show its direct relationship to the educational policies followed and the educational services provided. These educational policies, financed by the budget, should be presented to the public by a continuous program of public relations. Every special occasion and legitimate channel should be utilized to inform the public of the current and anticipated educational activities. The entire program of public relations is, therefore, a part of the budget presentation.

Is Widespread Publicity Wise?

There are two contrasting points of view concerning the special effort that should be made at budget time in making the public aware of the detail included in the anticipated expenditures. One point of view maintains that the details of the budget should be carefully explained in an active campaign for public information. This might include the issuing of an illustrated pamphlet presenting services with the budget, or it might be a series of articles issued through the local press. The other point of view believes that extensive publicity at budget time arouses the opponents of public education and stimulates an attack upon the expenditures provided in the budget. According to this point of view, the administration would make no statements unless questions are raised and information requested. No generalization can be made concerning which is the wiser policy to follow. However, there does rest upon school administration the responsibility of giving an accounting to the public for the services rendered. The approval by the public of the educational activities and the budget for a fiscal period make such accounting a more simple and satisfactory process.

A number of factors are important in the procedure of presentation. The first of these is that cost must always be directly related to services. When services are to be added, the required expenditures should accompany such plans. Whenever an attack is made on the amount of funds to be expended, suggested reductions should be immediately related to the goods or services to be eliminated. A second important factor is that of time. Consideration of these matters should be given far enough in advance to make adequate explanation and provide adequate time for revision and modification.

Probably the most effective method of presenting the budget is to follow the conference method. If a representative group of people are brought together in conference, the details of the budget, well supported with factual information and graph-

ically presented, is most effective. Such presentation should be made not only to the board of education but to representatives of citizenship groups and representative committees of the staff. The conference method gives ample opportunity for discussion and explanation. Misinterpretation or misunderstanding which comes from reading a printed report cannot be corrected or answered because the questions do not come to the attention of the administrative staff.

Public Confidence Essential

The mounting costs of governmental functions and the growing irritation of tax-paying groups place upon the superintendents of schools and board of education a heavier obligation to exercise good administration in the preparation and operation of the annual budget. Only by maintaining public confidence and public support may the future of the youth of America be properly protected and the ideals of American democracy perpetuated. All funds now available must be used where they will do the greatest good, and additional funds must be found from federal or other sources to provide improved opportunities for education for underprivileged and undereducated youth throughout the country.

The issues raised in this presentation and the conclusions drawn may be summarized briefly, as follows:

1. *Budgetary procedure may and should be a democratic process in that every classification of staff members may be represented in determining the needs for housing, equipment, supplies, organization, and services to be financed, as these affect their particular service.*

a) Policies relating to every budgetary division, defining the nature and amount of service to be provided, the conditions of service and its payment, the character and amount of supplies, equipment, and housing, should be carefully

formulated and considered. The policies define the character of the program and serve as a basis for estimating the cost.

Representatives of every staff classification should participate in the formulation of policies affecting the service they represent.

b) The board of education reviews and adopts policies relating to the budget and reviews and adopts the budget. The superintendent of schools initiates the consideration and presentation of policies and supervises the assembly, presentation and administration of the budget. The business manager administers the assembly of the budget and its operation.

The principal assembles the budget requirements for his school and participates in the formulation of policies related to it. He participates in the administration of the budget.

The department heads, teachers, and non-certificated employees should be represented in the formulation of policies, the determination of needs, and in the application of the budget.

2. *Criteria for the review and revision of the budget are as follows:*

a) The budget should represent the extent and character of the educational program which the community is able and willing to support.

b) The relative value of each service, material, or improvement to the conduct of the educational program should determine the amount of the budget divisions.

c) The importance of each division to the long-term plan should determine the selection of units where choice must be made.

3. *A contingency fund is an undistributed reserve set up to meet extraordinary needs which could not be anticipated. This does not refer to the reserve carried to finance the subsequent budget until sufficient current receipts for that period are available.*

If the needs of each budget division have been carefully calculated, a contingency fund of 2 per cent should be adequate. The practice of carrying a large contingency fund in each division either reduces the flexibility of administration or requires frequent budget transfers.

A contingency fund should not be used as a substitute for careful budget preparation. It should make possible the financing of essential unanticipated needs and permit the normal functioning of the program without the wasteful delay otherwise required.

4. *The educational policies financed by the budget should be presented to the public by a continuous program of public relations. Every*

(Concluded on page 84)



Board of Education, Miami, Florida.—Left to right are Charles G. Turner, District 3; Russel F. Hand, District 2; Miss Ila Edwards, Secretary to the Superintendent; A. P. Walter, Business Manager; Van E. Blanton, Chairman, District 1; John J. Linsey, Attorney; James T. Wilson, Supt. of Public Instruction and President-Elect of F. E. A.; R. P. Terry, District 4; R. L. Ellis, District 5.

Democratic Practices in a Small School System

La Mar L. Hill¹

In reporting the Cleveland convention of the American Association of School Administrators, *Time* magazine observed that "no U. S. citizens are fonder of praising democracy than the heads of the most authoritarian institution—the U. S. school."² In an earlier edition, the statement was made that "in the U. S. school system the superintendent is an autocrat. But many have insisted that if U. S. schools are to produce democrats, they must be democratic in administration."³ In view of recent progress in school administration and in teaching methods, it is difficult to believe that the U. S. schools are entirely authoritarian, or that superintendents are autocratic. The democratic setups in many school systems, where there is a happy, enthusiastic, and co-operative atmosphere among members of the staff, other employees, and students, rather contradict some of the opinions expressed in the press.

Among the large cities the outstanding experiment in democracy is unquestionably the Denver School Policies Council, established a year ago. The Council consists of principals, teachers, clerks, and even janitors, all elected by their fellow workers. The teachers make up a majority of the Council. To decide major policies, 100 votes of the Council's 175 members, and the approval of the board of education are necessary. This group has committees to study such problems as pupils' homework, how big classes should be, teachers' retirement, and utilization of community resources. Former Superintendent Stoddard says of the Council: "It marks a trend."

The Redlands Experiment

In a small California city, progressive changes consistent with democratic theory and practice have been made. Immediately after he became superintendent of schools at Redlands two years ago, Mr. John Branigan sent a questionnaire to the teachers to find out what they thought about numerous problems of the schools, and the ways in which the local situation could be improved. Some of the typical questions asked were: (1) Should we adopt a policy of choosing certain organizations or events to sponsor, always keeping in mind, however, that the public school is a co-operative institution? (2) Do you suggest any changes in the curriculum? If so, what are they? (3) How may the administration assist you in the solution of personal teaching problems? (4) Do you feel you have enough opportunity to offer suggestions for the good of the children and the schools? Teachers were asked not to sign

¹Teacher of Commercial Subjects, Redlands Junior High School, Redlands, Calif.

²March 12, 1939.

³December 12, 1938.

their names unless they desired to do so. The answers contained reliable information, which has proved valuable, and some of the comments were very frank indeed and correspondingly useful.

A variety of significant activities have and are being fostered. In co-operation with the superintendent, a committee of teachers representing the various school levels has developed a much needed salary schedule. The schedule has been adopted by the board of education.

A great many of the curriculum problems are being investigated, and studied, and solved by a curriculum committee, consisting of teachers from each level and subject department, working with the supervisors. Much has been accomplished toward curriculum co-ordination and improvement.

Virtually all of the school news is written by a committee of teachers from various school levels and the superintendent's private secretary. It is called the "Public Relations Committee."

An Administrative Council

The outstanding application of democratic philosophy of school administration in the Redlands schools is found in the Administrative Council. Membership includes the superintendent of schools, the superintendent of buildings and grounds, the purchasing agent of the school board, the superintendent's private secretary, the president of the City Teachers' Club, three teachers (one from each level), the several supervisors and principals. All major problems and policies of the school system are discussed by the Council in meetings held once a month. To decide a major issue, a majority vote of the Council, and the board of education's approval are necessary. The superintendent enters all the discussions, but he does not vote and he has not assumed veto power.

Numerous important problems involving administrative policy have been studied and debated—public relations, teachers' resignations, budgets, professional libraries for teachers, building programs, supplies, repairs, etc.

One of the typical problems encountered was the calendar for the school year 1939-40. The solution of this problem demonstrates very well an application of democratic co-operative principles in a practical way.

For years the Redlands schools have been operating on a short schedule, 172 school days per year. Subsequently, many of the Redlands high-school graduates have complained that they were not given advantages afforded in other schools. Some parents thought that a longer year would enable their children to compete on a fairer

basis with students from other school systems, in college and life. Other parents and students thought the year long enough. The consensus of teachers' opinion was that a study should be made, keeping in mind that the calendar should be adjusted to give students the most advantages consistent with local conditions.

A Problem Solved

The superintendent, therefore, appointed three teachers on the Council to study some of California's typical school calendars. Contacts were made with 23 school systems and 19 responded with copies of their 1938-39 or 1939-40 calendars. Only two school systems of the 19 answered that their calendars are less than 180 school days; the rest have 180 days or more. Professor Hiram W. Edwards, of the University of California (Los Angeles) provided the committee with information covering the calendars of 490 different California schools, indicating that 88 school systems have less than 180 days, while 402 school communities have 180 days or more.

A small majority of the parents expressed their desire, in a questionnaire, for 175 school days per school year; a large majority asked for 17 days of Christmas vacation; and the largest majority for school to start one week early.

The calendar committee presented to the Council two possible combinations to produce 177 net school days for the year. The Council and the board of education unanimously approved one of the combinations.

It is Mr. Branigan's opinion that the Administrative Council is of considerable value. The solution of administrative problems has been continuously simplified and a great amount of worry and exhaustive work has been eliminated. The Council is an excellent advisory body, because minds and judgments are pooled. Decisions are the result of group discussions, investigations, studies, and suspended judgment.

It is planned to enlarge the Council's membership in order to give teachers a greater representation. Mr. Branigan says: "It gives the best possible public relations due to a more comprehensive and intelligent interpretation of what is being done in our schools."

In our democracy it should not be very difficult to justify the application of its principles in the operation of our schools. Where these principles have been applied, the outcome is one of new enthusiasm and alertness among teachers and students. Teachers as a group possess considerable ability, intelligence, and ingenuity, and if given an opportunity to share in the administration of schools, contribute substantially toward improving them.

School Property Accounting in California*

T. L. McCuen**

School property management, while often discussed, has not been developed in actual practice to the same degree as fiscal and educational management. The property of a school district includes the land, buildings, and equipment necessary for the operation of the schools of the district. This property must be managed to the end that it will render maximum service in providing educational opportunities for the district. Efficient management is based on proper records.

There is a tendency to disregard money value when cash is converted into goods. However, equipment has a cash value and should be accounted for accordingly. Schools keep financial records on receipts and expenditures of money. When money is exchanged for equipment, the school district has obtained property of value. Adequate records should be kept on this property. The value of equipment will vary with depreciation and maintenance policies, since under an adequate maintenance program equipment may have an extended service life.

Inventories and Accounting

The inventory is an integral part of property management and property accounting. In a study¹ conducted recently it was concluded that inventories of school equipment are taken by about 75 per cent of the large city systems in the United States. A plan of inventory must be determined before school property can be accounted for. A business concern organized and conducted for profit takes an inventory periodically, as an integral of the profit and loss statement. Although schools are not organized for profit, they also possess property of value and accordingly should take an inventory regularly.

Most school inventories at the present time are kept for the purpose of determining insurable values of property. In case of fire, a carefully kept inventory record is of inestimable value in making a settlement with the insurance companies. The school inventory will also help to prevent the loss of property through theft and misplacement. It will be of value when replacing equipment and in planning a maintenance program. Furthermore, an inventory will be a safeguard against the purchase of unnecessary equipment.

An equipment ledger should be provided in establishing a proper inventory system. De Young² writes: "The accounting for property involves the recording of both its value and its depreciation. Although many

officials have no record of school property, such a memorandum is highly desirable. . . . It is strongly recommended that an accurate account of property values be kept by deducting depreciation and adding the value of accretions in land, buildings, or equipment."

Since property accounting is of value in the business administration of public schools, one might well ask the question "How extensively is school property accounting practiced?" Another proper question would be "How nearly does present practice conform to proposed standards?"

The study here reported is the result of an effort to determine how nearly representative school districts of California conform to the only available school property accounting standards; those outlined by Engelhardt and Engelhardt³ in their *Survey Manual for the Business Administration in Public School Systems*.

Study of California Practices

The data for the study were gathered through a questionnaire based on the data sheets covering the subject of property accounting in the survey manual of Engelhardt and Engelhardt. This questionnaire was distributed to 100 of the largest school districts in California. Replies were received from 76 districts.

The study is divided into the following subjects: (1) Lands, (2) Buildings, (3) Permanent Equipment and Property, (4) Movable Equipment in Storage, (5) Movable Equipment in Use, and (6) Inventory Methods and the Property Ledger.

The subject of Lands has been considered under the following subdivisions: (1) School Sites, (2) Playgrounds, (3) Land for Future Sites, (4) Lands Leased to Others, and (5) Other Lands. Each type of land is studied in relation to such descriptive data as: (a) Exact location, (b) Area, (c) Date of purchase, (d) Original Cost, (e) Cost of Grading and Clearing, (f) Cost of Landscaping, (g) Cost of Legal Documents, (h) Other Costs, and (i) Where Deeds are Filed. Each district was asked to indicate which of the above data were available in a property record for each type of land. Recognition must be given to the probability that many replies to the questionnaire may have been based on information which could be located from unorganized data, rather than on information kept according to a definite system and to accomplish a definite purpose.

Many districts do not have lands of some of the types listed, so the data obtained for these lands cannot be considered valid. Since all schools have school sites, an analysis of the figures related to this type of land should be significant. Of the 76 dis-

tricts reporting, 71 or 93.4 per cent, state that they have some kind of property record which gives the exact location of their sites, 92.1 per cent have a record of the area; 81.6 per cent have a record of the date of purchase; 75 per cent have a record of the original cost; 25 per cent have a record of the cost of grading and clearing; 27.6 per cent have a record of the cost of landscaping; 23.7 per cent have a record of other costs; and 67.1 per cent have a record of where the deeds are filed.

Buildings have been classified as those: (1) Used for Administrative Purposes; (2) For School Buildings, (3) Buildings Leased Out, (4) Buildings Unoccupied Temporarily, (5) Condemned Buildings, (6) Uncompleted Buildings, (7) Other Buildings. Data considered relative to buildings together with percentage of incidence figures for the classification for school buildings are: (a) Location, 82.9; (b) Description—Floor Area, Number of Rooms, 69.7; (c) Date of Construction or Purchase, 78.9; (d) Total Cost of Structure, 76.3; (e) Name of Architect, 73.7; (f) Name of Contractor, 68.4; (g) Location of Plans and Specifications, 77.6; (h) Estimated Value, 75.0; (i) Capital Outlays During the Year, 61.8; (j) Depreciation, 30.3; (k) Date of Insurance, 81.6; and (l) Rate of Insurance, 84.2.

It will be noted that the item most frequently kept, relative to school building records, is item (l) Rate of Insurance. Location, item (a) ranks second with 82.9 per cent, followed by item (k) Date of Insurance at 81.6 per cent. The lowest ranking item relative to buildings is Depreciation, with 30.3 per cent of the schools reporting, indicating a record of depreciation on their school buildings.

Equipment Accounting

The third type of property considered is Permanent Equipment and Property, which is divided as follows: (1) Electric Wiring and Gas Fixtures, (2) Fire-Protection Equipment, (3) Heating and Ventilating Equipment, (4) Water-System Equipment, (5) Sanitary Equipment, (6) Grounds Equipment, Fences, Walks, (7) Lockers, (8) Clocks, and (9) Other. The data descriptive of this type of property are: (a) Date of Installment or Purchase—new or replacement, (b) Location of Plans and Specifications, (c) Original Cost, (d) Capital Outlays During Year, (e) Repairs, (f) Depreciation, (g) Estimated Value.

Many of the types of property included in this group are considered as integral parts of the building. As such, it would appear proper to include them in the building records. The types of data recorded most often appear to be (a) Date of Installment or Purchase, (b) Location of Plans, (c) Capital Outlays during the Year, and (d) Repairs. Location of plans

*A summary of a paper presented at the twelfth annual convention of the Public School Business Officials Association of the State of California, March, 1939.

**Business Manager, Kern County Union High School District, Bakersfield, Calif.

¹Bulletin No. 4, *The School Inventory*, N. A. P. S. B. O., 1933.

²De Young, Chris A., *Budgeting in Public Schools*, p. 228.

³Engelhardt, N. L. and Engelhardt, Fred, *Survey Manual for the Business Administration in Public School Systems*.

and specifications on Heating and Ventilating Equipment heads the list at 44.7 per cent. The importance of having available plans and specifications on electric wiring, heating and ventilating, plumbing, and all other built-in mechanical equipment cannot be overemphasized. Such plans are invaluable in planning repairs, alterations, or additions to present equipment.

Many school districts do not have movable equipment in storage. This may be due, partly, to a lack of adequate storage space, for this requirement is often sacrificed in school-building construction. Movable Equipment in Storage has been divided as follows: (1) All Kinds of Furniture, (2) All Kinds of Equipment, (3) Instructional Apparatus, (4) Old Furniture that May be Sold, and (5) All Other Equipment. Data studied relative to these topics are: (a) Description, (b) Date of Purchase, (c) When Stored Away, (d) Where Stored, (e) Original Cost, (f) Depreciation, and (g) Estimated Value. The results of the study for this section show that a description of the property is the item most often recorded. This is followed by original cost and estimated value.

The final type of equipment included in the study is Movable Equipment in Use. This type is divided into: (1) Office Furniture and Equipment; (2) Classroom Furniture and Equipment; (3) Instructional Furniture and Equipment; (4) Auditorium Furniture and Stage Equipment; (5) Library Furniture; (6) Tools and Implements; (7) Carpets and Rugs; (8) Cafeteria Furniture and Equipment; and (9) Automobile Equipment. Descriptive data studied in relation to Movable Equipment in Use is as follows: (a) Description; (b) Date of Purchase—new or replacement; (c) Original Cost; (d) Repairs; (e) Depreciation; and (f) Estimated Value. The study indicates that about 60 per cent of the districts have a record of the description of the furniture and equipment in use, about 40 per cent have a record of the date of purchase. Description of property heads the list for office furniture and classroom furniture and equipment, while estimated value, original cost, and date of purchase follow in that order. It is interesting to note that more districts do not keep more complete records on automotive equipment than the figures gathered in this study indicate.

The final section of the study includes an observation of inventory methods and the property ledger. In answer to the question "Is there a general property ledger?" 34.2 per cent or 26 of the districts answered in the affirmative. Table I shows the methods used in recording property by those districts reporting the use of property ledgers. Frequency of items is shown by number and by per cent, based on the total number using property ledgers.

Summary and Conclusions

1. The results of this study cannot be considered as representing the practice of all the schools of the state, since 100 of the

TABLE I. Inventory Methods — Including Replies of Districts Reporting Property Ledgers

Showing methods used in recording property by those districts reporting the use of property ledgers. Frequency of items is shown by number and by per cent, based on total number using property ledgers.

	No.	Per Cent
1. Is there a general property ledger?	26	100
2. Is a standard nomenclature used?	16	61.5
3. Is each unit of property listed separately?	22	84.6
4. If the card system is used, is there:		
a) A gift card?	0	0
b) A loan card for articles stored away?	3	11.5
c) A storage card for articles stored away?	3	11.5
1. Does the ledger make provisions for the following data?		
a) Original cost	22	84.6
b) Annual depreciation	7	26.9
c) Annual capital investment	17	65.4
d) Repair	4	15.4
e) Estimated value	14	53.9
f) Sales	8	30.8
g) Where more detailed information about each item may be found	4	15.4
1. Are the following forms used?		
a) Loose-leaf form with make-up permitting it to serve as inventory for each separate unit of property	15	57.7
b) Insurance record	16	61.5
c) Insurance appraisal	15	57.7
d) Capital outlay	17	65.4
1. Does the nomenclature of the record forms provide for the following data?		
a) Date of construction or purchase	17	65.4
b) Description	20	76.9
c) Total cost	19	73.1
d) Annual depreciation	7	26.9
e) Amount in depreciated reserve	2	7.7
f) Location of sites, buildings	16	61.5
g) Type of construction	16	61.5
h) Information as to contractors and architects	8	30.8

largest districts only were selected to participate, and only 76 of these sent in replies. The results shown may be con-

sidered a cross section of the practices of the more progressive districts.

2. The schools included in this study keep property records supplying that information which is of most value for insurance purposes.

3. It may be said that the schools included in the survey do not measure up to the standards set by Engelhardt and Engelhardt for school-property accounting.

4. Each district may well study its property-accounting problems in the light of these standards and formulate a system which will meet the requirements of that particular district.

5. A uniform system of property accounting should be prescribed for the state. This system should be designed so that it might be condensed to meet the needs of smaller districts, or extended to fit the requirements of the large districts.

6. Records must not be kept merely for the sake of keeping them. Each type of information included in a property-record system must accomplish a definite purpose. It must be of sufficient value as an aid to property management to justify the expense of continuing it.

THE SCHOOL BOARD

The board's responsibility is to provide the best possible educational facilities for the children, conserving what we have to the best of our financial restrictions. We also owe a duty to see that teachers are compensated adequately for their services and that schoolrooms are not overcrowded. The responsibility for providing recreational activities and social centers for neighborhood groups properly belongs to the city.—*Paul O. Strawhecker, Member, Board of Education, Grand Rapids, Mich.*

THE EASY WAY

As a school child I was forced to walk a mile to school regardless of weather. Children would make better citizens if things were harder for them. Ask any teacher.—*Mrs. Viola T. Word, Member School Committee, North Providence, R. I.*



The board of education at La Crosse, Wisconsin, is a policy-making body and represents the widest variety of community interests and abilities. Left to right: Mr. Benjamin Franke, railroad engineer; Dr. Alfred Gundersen, physician; Mr. Robert Franklin, public service executive; Mr. Gilford M. Wiley, superintendent of schools; Mr. William L. Rossiter, president of the board and brewery executive; Mr. Otto Zielke, grocer; Mr. Walter Bieglow, transfer agent; Mrs. G. W. Lueck, vice-president of board of education.

The Kentucky School Boards Association Makes Progress

W. D. Nicholls¹

The Kentucky School Boards Association had its beginning in April, 1936, when during the annual meeting of the Kentucky Education Association in Louisville a group of board members met and discussed the advantages which might be gained through a state-wide organization. An organization committee was formed and since that time has been actively at work in urging all board members to join in the movement and participate in formulating and carrying out its objectives.

Substantial progress was registered when the second annual meeting in April, 1937, showed a greatly increased interest and attendance, representing boards in every section of the state. Following this meeting, activities of the organization committee were continued with increased effectiveness. Visits to more than half of the counties in the state were made by the representatives of the Association and the finest spirit of cooperation on the part of board members and school executives was shown. Meetings were held in each of the eleven districts of the State Education Association. These meetings were well attended by board members and school executives, and the discussions were mutually beneficial.

Representatives of the school-board organization gave addresses before the general assemblies of the annual meeting of the Kentucky Education Association, the district associations of that organization, and other meetings of teachers and school executives. As a result of this interest a large number of school boards gave their assurance that they were ready to give their fullest moral and financial support to the project.

At the third annual state meeting in April, 1938, a still larger and more enthusiastic group of board members came together and carried out a most constructive convention program. At this meeting the Association adopted its Constitution, set out its aims and objectives, and appointed the necessary committees to carry on its work for the ensuing year. These committees were made up of outstanding board members in every section of the state and they had the assistance of able school executives. The Association secured the assistance of the Executive Secretary of the New York State School Boards Association in setting up the organization and in drafting its Constitution. His services were invaluable.

The organization committee continued its work enlisting interest in the Association, and during the year 1939, in addition to the regular district association meetings which were held in each of the eleven districts, special group meetings of school-board members and school executives were held in every section of the state. The activities of the Association at its district and annual meetings and especially the activities of its organization committee in holding group conferences have convinced a large majority of the boards that membership in the Association offers a greater opportunity for service.

The annual meeting in April, 1939, was the best attended and the most enthusiastic and helpful meeting of school-board members ever held in Kentucky. At this meeting the Association appointed an Executive Secretary and Treasurer, adopted a scale of membership fees based on the number of teachers employed, and formulated plans to send notices for dues according to the adopted scale. The indications are that a large majority of the boards will pay their fees and by so doing make possible a wider service for the Association.

The effectiveness of a board members' organization is strikingly shown by the experience of the New York State School Boards Association which has been in active operation for the past ten years. High praises of that organization were given by Dr. George D. Strayer of Teachers College University, who in commenting said: "The accomplishments of the New York State School Boards Association have been outstanding. If anything of interest to school boards happens, a bulletin on the subject is sent to all board members within 48 hours. The Association is constantly on the job. Probably the most effective work which this organization has done is to promote the state appropriations for schools. The Association is a powerful, active influence in advancing and protecting the interests of the public schools. It conducted a vigorous campaign to restore full state aid to school districts, which the legislature had reduced, and was instrumental in having the reduction restored to the full amount originally appropriated. The Association watches proposed legislation carefully and keeps school boards informed concerning it. I foresee very important consequences from this movement throughout the nation."

Similar endorsements have been given by other noted educators such as Dr. A. J. Stoddard and Dr. Harlan H. Horner.

The fixed policy of the Kentucky School Boards Association from the beginning has been to work in the closest cooperation with the Kentucky Education Association and the State Department of Education, and to strive always to uphold the arms of school superintendents and other executives, helping them make conditions favorable for developing the best possible educational programs. The Association stands guard to prevent the upsetting of progressive programs by selfish interests. One illustration of this was the constructive part which the Association played last winter in helping defeat the bill providing for the election of county superintendents by popular vote. The Association promptly offered its services to the State Department of Education and the Kentucky Education Association to oppose this measure. The executive committee of the Association acted promptly to adopt a resolution of protest and send this to each member of the Senate and House. A personal letter over the signature of the President of the Association was written to every one of the more than 1300 school-board members in Kentucky, urging each of them to contact his senator and house member and urge them to vote and work against the bill.

The Kentucky State School-Board Association plans to organize for more effective service this potentially powerful group of laymen. In brief, the objectives of this association may be summarized as follows:

1. To help school-board members to become better informed of their duties and responsibilities to the schools under their management and control.

2. To help board members to keep abreast of the steady change in educational policies so that they may better understand the recommendations and objectives of their administrative officers when these educators are seeking expansion and improvement of educational services in the schools of their districts.

3. To give board members a vision of the services which they may render through cooperative efforts to the state's program of education in their united efforts in association activities.

4. To serve as a medium for the exchange of ideas on legal and professional matters upon which they need knowledge in order to render more effective service as board members.

5. To raise to the dignity which it deserves the important office of board membership and to build up among board members a morale and a pride in the work they are performing for the children of Kentucky.

6. To endeavor to find ways and means to increase the good will of the public toward the schools and to stimulate a willingness on the part of the best citizens of the community to serve as board members when the need arises.

7. To promote and encourage research upon problems affecting efficiency and economy in the management and control of the schools.

8. To use the organized forces of the association to obtain the passage of legislation favorable to the schools and to defeat legislation which is contrary to the interests of education in Kentucky.

9. To co-operate with the Kentucky Education Association in its efforts to improve educational conditions in the state.

10. To co-operate with the State Department of Education, the parent-teacher association, and other district, state and national organizations endeavoring to advance the cause of education.

In addition to the above general objectives the immediate objectives of the association for the current year are:

1. To enlist in its organization every school board in Kentucky.

2. To co-operate with the Kentucky Education Association in obtaining the passage of desirable legislation for adequate support of education.

3. To co-operate with the Kentucky Education Association and other organizations in their efforts to obtain federal aid to education.

4. To study insurance rates on school property in Kentucky and to take such measures as are necessary to obtain lower rates on school buildings, school buses, and school treasurers' bonds.

¹This address at the annual meeting of the Association, April 13, 1939, was read by Vice-President W. D. Nicholls, member of the board of education, Lexington, Ky.

For Better School Auditorium Seating

H. E. Bennett, Ph.D.¹

Quality and quality groups in this connection are considered strictly as use-values. Use-values in auditorium seating are only those which affect the use-values of the auditorium in which they are installed. The function of the school auditorium is to provide a suitable place for assembly and large group activities of both the school and the community, attendance being sometimes voluntary on the part of members of the school and always so on the part of the community. Attendance at these auditorium activities is assumed to have a genuine social value to the taxpaying community, and only in terms of such attendance can the expenditure of public money for the auditorium be justified. To the extent that the auditorium remains unused, it is a profitless investment or dead loss. The returns on the investment are to be measured in terms of attendance at the auditorium activities as truly as the admission fees charged for theater attendance are the measure of the returns for the investment in a theater.

The educational, cultural, entertainment, and other social values of the activities conducted in the auditorium constitute use-values which are not directly affected by the seating, but the receptivity of the individuals constituting the audience is a very large factor in these values and this receptivity is largely influenced by the physical and mental effects of the seating conditions. Whatever mental, social, civic, or aesthetic value a given auditorium activity may have for the individuals attending may be destroyed in large part by physical discomforts, distractions, annoyances, and even by acoustical difficulties incident to the seating of the hall.

As a means of stating these intangible values in a more concrete form, it may be assumed that the cash outlay for the seating of an auditorium will be between 3 and 5 per cent of the cost of the auditorium itself. Should the seating at the higher price limit increase the effectiveness of the auditorium activities, either in terms of increased voluntary attendance or increased appreciation or both, by as much as 2 per cent the additional investment for the better seating is justified in the same degree as is the investment in the auditorium as a whole. Should the effectiveness of the auditorium activities be increased by 25, 50, or 100 per cent as a result of the better seating equipment, it is the value to the community of the auditorium as a whole, and hence the return on the entire investment, that is so greatly increased by the 2 per cent increase in the outlay.

The qualities of the seating equipment by which the use values of the auditorium are affected may be summarized briefly as follows: (1) comfort, (2) freedom from distractions, annoyances and injury hazards of all kinds, (3) acoustics, (4) direct economies related to the seating in itself.

These four classes of values will be considered in connection with the various materials, parts, constructions, and designs which enter into the making of auditorium chairs.

Upholstering. A few years ago upholstered seats were not considered in connection with school auditoriums. At the present time, about

25 per cent of school auditorium installations are upholstered and the proportion increases very rapidly. The reason is in the rapidly growing appreciation of the very great degree in which upholstered seats contribute to the efficiency and drawing power of the auditorium and hence to the community return on the investment. People are becoming accustomed to upholstered seats in their homes, on public and private conveyances, and in places of entertainment. Theaters, with practically no exceptions, are now equipped with upholstered seats not for sentimental reasons but because people will not consent to sit on others. Their drawing power is fully established and is as valid with reference to unpaid as to paid attendance. Furthermore, comfort is a very large factor in receptivity and responsiveness. It is an indisputable psychological fact that physical discomfort or restlessness detracts very seriously not only from concentration but from pleasurable attitudes and responsiveness of an audience.

Acoustical Balance Aided

Another important factor which upholstered seating contributes to the effectiveness of an auditorium is acoustical balance. The acoustical treatment of the room itself must assume the seating and audience as a constant factor. Several hundred seats presenting hard, sound-reflecting surfaces only, have a very different effect when occupied than when empty, with the result that, regardless of wall and ceiling treatment, sound absorption is excessive when the audience is large or very deficient if the group is small. A well-designed upholstered chair, however, has approximately the same sound-absorption value when occupied as when unoccupied and thus insures constant acoustical conditions.

It has frequently been assumed that upholstered chairs in a school auditorium are unduly expensive and rapidly deteriorate through the destructive tendencies of school children and even that they encourage such destructive tendencies. The almost invariable experience of school administrators, however, is to the contrary. Children respect attractive, comfortable chairs and are less likely to injure them than those which are uncomfortable. It is far more common to find plywood seats which have invited mischievous tendencies of pocketknives and pencils than is the case with a good quality of upholstering. While it cannot be said that a high quality of well-made plywood seats will not last as long as any type of seat made, under ordinary conditions of wear, the life of service of the best grades of imitation leather under similar conditions is so great that the cost factor is negligible and is incalculably overbalanced by the other use-values, especially when considered in connection with the serviceability of the auditorium as a whole. Orders for replacement of upholstering for school auditorium seating are practically unknown.

In purchasing upholstered auditorium chairs, carefully drawn specifications are particularly necessary to protect the purchaser against inferior products. Springs, padding, covering materials, and the methods of assembling these, vary in countless respects affecting comfort and length of satisfactory serviceability. It is impossible even for experts to

determine all these values by inspection of samples, or for specifications to be drawn or enforced which will insure protection from serious defects. Complete protection is possible only through dependence on responsible manufacturers whose long experience, policies, and facilities provide for rigid specification of materials used, expert manufacturing, and thorough testing and inspection. While high quality cannot be cheap, it is by no means true that high price assures quality. Experience and efficient manufacturing methods often contribute more to economy than do cheap materials.

For example: It is proved in laboratory tests that certain imitation leather covering materials will withstand fifty times as much wear in use as others which are practically indistinguishable to the eye. Similar differences occur in respect to cracking, aging, staining, tackiness, corner and edge wear, etc., among samples which look alike. "You can't tell by looking at it."

Specifications adequate to detect such differences must include at least some relevant accelerated performance tests, and these are welcomed by manufacturers who know that their products will safely withstand them. So far as practicable, quality factors should be indicated descriptively.

Wood and Metal Parts

Plywood. The best plywood may be depended on to endure severe usage indefinitely. Inferior plywood, indistinguishable from the best in appearance, is a constant source of trouble and of injury hazards due to chipping, peeling, and breakage. The U. S. Forest Products Laboratory standards and tests should be required.

Cast-Iron Standards. Desk standards should conform to established chemical formulas and strength tests to avoid breakage at any time through strains or shocks. Cross-section design also must provide for ribs and other means of securing adequate strength where required without excessive mass. Acceptably artistic designs should be available and all castings must be smooth finished and free from fins, blowholes, roughness, and other defects. On sloping floors each standard must be specially formed to stand vertically and support the seat at the correct height and slope.

Seat Hinges and Back Clips. In many auditoriums, sloping floors, curved seat rows, and converging aisles create complex engineering problems in securing a satisfactory installation. Inflexible chairs result at best in irregular rows and alignments. In any auditorium there may be slight floor irregularities and building inaccuracies, and the drilling of holes in concrete floors for attaching chairs cannot be absolutely accurate. Inflexible chairs under such conditions may cause serious delays and expense in installation, besides being subjected to strains which will cause immediate or subsequent breakage, looseness, or squeaks. To meet these conditions, "indirect" seat hinges and back clips are used to compensate for all such calculable or incalculable factors. Additional expense for these features is small, and they should be specified even when chairs are bought installed because they protect the purchaser from delays and liabilities incident to

¹Research Specialist in School Seating, American Seating Company, Grand Rapids, Mich.

building inaccuracies and because they insure more satisfactory serviceability of the installation. At best the difference between installation of compensating or flexible as opposed to inflexible chairs is similar to that between a tailor-made and a ready-made suit.

Specifications should furthermore provide against the development of noise and binding in the hinge action or need at any time for grease or oiling, by designating hinges having accurately machined parts, ball-bearing movement, and permanent internal lubrication.

Quality and Price Groups. Auditorium chairs are regularly sold in an endless variety of combinations of different parts. For example: Backs may be of plain 5 or 7 ply, steel panels, unbound or metal clad, padded, inserted panel padded, or spring cushioned—each in various qualities. Seats may be of plywood, metal-clad, padded, or spring construction. Any of these may be used with various standards, hinges, back attachments, and a limitless range of upholstering materials is available with the different springs, padings, and methods of upholstering.

How to Write the Specifications

Unless some authority can assume to limit choice by setting up fixed combinations of parts which shall constitute each group, it is obvious that no rigid-group specifications can be prepared to meet all conditions. It therefore seems to be more practicable to provide specifications separately for each clearly defined type of back, seat, standard, hinge, etc., and to permit each purchaser to combine these as he may see fit to secure the character of chair he seeks. This corresponds with the actual buying practices, provides for as many groups as there may be desirable combinations of parts, and also permits each purchaser to specify such combination as may be available at the price he wishes to pay.

In any particular combination of parts which may be so specified, the actual market-price range between the best and the poorest offering on the market will probably not exceed 15 per cent difference. It is therefore especially desirable that specifications for any desired combination should include such close description and performance tests as will eliminate unsatisfactory products. This is eminently fair to all manufacturers since there are very few proprietary features or significant methods of production which are not common to all chairs or comparable quality.

NEW YORK CONTROLS USE OF SCHOOL BUILDINGS

The board of education of New York City recently had under discussion a rule which forbid the use of the public schools to speakers who dealt in controversial questions. The rule was not adopted, but instead, the board gave out the following as being expressive of its policy on the subject:

"The board of education believes that the basic American principles of free speech and liberty to assemble and petition for redress of grievances, guaranteed in the Bill of Rights of our Federal and State Constitutions, should be forwarded by our school system, and that the spirit of free discussion and public use of school buildings implicit in the state education law should be respected.

"These principles are to be limited only in the interest of the protection of the state and our democratic form of gov-

What the Efficient School Board Does and Does Not Do

Walter H. Gaumnitz¹

The School Board Does

1. It transacts its business in board meetings at a regular time and place.
2. It acts as a body or on authority of the board as a whole.
3. It employs the best superintendent, principal, or teacher it can get and dismisses him only for incompetence and similar causes.
4. After careful study of all the factors involved and upon advice of trained leadership it adopts rules and regulations to govern most of the important school situations.
5. A large portion of the board meeting is used to decide important questions of policy.
6. It sees to it that a carefully planned budget is made in advance and that other accepted business practices are instituted to care automatically and effectively for the purchase of services and supplies, as well as for most other problems of finance.
7. The superintendent or other person in charge of the schools nominates all employees and recommends dismissals; the board approves in most cases.
8. Problems of salary, tenure, promotions, leave, etc., are carefully studied and definite policies adopted.
9. It leaves the assignment of specific duties, the transfer and the supervision of employees, to the person administratively in charge of the school.
10. It supports the school head loyally in the performance of his duties. Disagreements on policy are taken up in board meeting and all the facts determined.
11. It requires adequate reports concerning business and financial matters, educational achievements and the efficiency of employees.
12. It insists that all accounts be audited at regular intervals by certified accountants.
13. It studies its building needs in advance, acquires desirable sites, and adopts a sound policy for financing new school buildings.
14. It secures the services of experts in planning and building new school plants.
15. The board is careful to conform to the school laws fixed by the state.
16. The board makes every effort to determine the educational desires and needs of the people by holding hearings on important issues, inviting criticism, and the like.
17. The board keeps the public informed about its policies and makes frequent reports on school activities.
18. The school board is alert to better types of school organization and school administration. To serve the best interests of the people it will take steps to enlarge the district or to seek its own abandonment.

¹In *National Parent-Teacher*, April, 1938.

The School Board Does Not

1. It does not consider official matters any time, anywhere.
2. It does not meddle in school affairs as individuals.
3. It does not employ in its schools almost anyone who has the proper license who can be secured at a low salary or who is a special friend of a board member or of other influential citizens.
4. It does not "run the schools" itself or attempt to solve its various problems on the basis of personal interests.
5. It does not use its time in approving bills, studying the catalogs, or wrangling over the best way to teach long division.
6. It does not attempt to conduct the business of the schools without a budget or to buy supplies in small quantities or upon the recommendations of high-pressure salesmen. It does not authorize separately each purchase to be made or each bill to be paid.
7. It does not investigate applications, make appointments, or dismiss employees without the assistance of the school superintendent or principal.
8. It does not play favorites or leave these matters to chance or personal interpretation.
9. The board, or its individual members, does not, as a rule, directly give instructions to the teachers and other employees of the schools.
10. It does not, out of board meetings, criticize or countermand the action of the school head. It does not undermine his effectiveness.
11. Few reports are required and the board pays little attention to the reports received.
12. It does not leave any doubt in the public mind concerning the honesty of school expenditures or the accuracy of school accounts.
13. It does not buy "left-over" sites, or connive with speculators in buying sites or in contracting for new structures; nor does it contract debts carelessly or without plans for liquidating the outstanding as well as the new obligations.
14. It does not itself plan new buildings or supervise their construction.
15. It does not ignore legal provisions or frequently get into legal difficulties.
16. It does not assume to "know best" in all matters or to adopt policies arbitrarily, or even contrary to the wishes of the public.
17. It does not deal with school affairs as if they were secret or their own private concern.
18. It does not let tradition or self-interest obscure its vision. If greater efficiency and better educational opportunities for boys and girls demand it the school board will not hesitate to recommend a new and better administrative organization even if the result is its own dissolution.

ernment; and, to this end, we advise the superintendent of schools that in our opinion no meeting is to be held in a school building by any person or organization for the purpose of advocating or at which there is advocated domestic violence or the overthrow of our government by force; or which is called for the purpose of advocating

or at which there is advocated intolerance of any religious or racial group.

"These principles have been the policy of the board of education for some years and will be applied in the future, and the use of schools will be denied to anyone who has violated the principles above set forth or any other regulation of the board of education."

Should Standards be Adopted for Stencil Duplicated Classroom Materials?

David W. Russell, Ph.D.¹

During the past few years there has been considerable emphasis upon the development of good reading habits and upon the correction of eye difficulties among school children and college students. Rather startling findings have been made which indicate that the American schoolboy and college student are under "par" in ability to read and comprehend well.² In many instances, poor reading habits have been held responsible for "failures" in the classroom, and often when there has been a correction of eye co-ordination through improved reading situations, a corresponding improvement in academic achievement has been shown, according to standardized means of measurement. It has been suggested also that the improvement of reading technique and materials may indirectly contribute to an increase in the intelligence quotient, which is commonly looked upon as a constant index to a person's mental ability.³ The continual and painstaking efforts of research departments and teachers to improve reading comprehension among children have brought about the development of mechanical devices to improve eye co-ordination and reading techniques.⁴ Much has been done to improve the form of the printed page, the size of type and spacing, and even the color and finish of paper as a means of determining standards best suited for readers at different age levels.

A. How Important is Stencil Duplicated Material?

Parallel with these developments has been the increasing use of more teacher-made and school-made reading materials, such as work sheets, bulletins, tests, courses of study, and other curricular materials. Since these materials are generally tentative in content, they are used for a short time and then revised. They are usually reproduced on stencil duplicating machines, because printing is often too expensive. Consequently, stencil duplicators and similar devices have become standard equipment in many schools and are the means of providing a quantity of material that is being read by thousands of persons. To the teachers, research workers in reading, and administrators, the question naturally arises: Should as high standards be established for stencil duplicated materials as for textbooks which are designed to conform with current techniques for developing reading speed and comprehension? The question is an important one but up to the present very little investigation has been undertaken toward answering it.

¹National College of Education, Evanston, Ill.

²H. A. Innes, J. W. Rothney, R. M. Bear, *An Evaluation of Visual Factors in Reading*, Hanover, N. H., Dartmouth College Publication, 1938.

³Results of research indicating that the *Intelligence Quotient* can change with training is given in: Beth L. Wellman, "Guiding Mental Development," *Childhood Education*, XV, No. 3 (Nov., 1938), pp. 145-148.

⁴For new procedures used for developing reading ability and comprehension, see: Louise F. Davis, "The Teaching of Reading to the Visual Handicapped Child," *Peabody Journal of Education*, XVI (Nov., 1938), pp. 201-205; V. Ilg, Louise F. Davis and W. S. Gray, "Training Eyes to Read," *Parents' Magazine*, XIII, No. 9 (Sept., 1938), p. 22 ff. Suggestions for developing reading ability in relation to the language arts is explained in: Clara Belle Baker, "Developing the Language Arts," *Childhood Education*, XV, No. 5 (Jan., 1939), pp. 224-227.

B. Comparing Stencil Duplicated Materials

To consider this question, stencil duplicated bulletins for elementary schools, from nine cities, were analyzed and sorted according to the quality of workmanship. Several were examples of excellent work, while others ranged from mediocre to very poor, and a few were almost unreadable! The poor examples were difficult to read because of blurred letters, partly printed words and phrases, uneven distribution of ink, and other irregularities. This comparison alone was sufficient to indicate the importance of good stencil duplicated material, for in several of these bulletins were included work pages for children which not only required reading but

TABLE I. Approximate Foot-Candles Necessary to Maintain a Given Standard of Visibility for Different Reading Tasks^a

Zone	Foot-candles
1. For twelve-point type of high standard printing. Minimum size, particularly desirable for young and old.....	10
2. For six-point type of high standard printing. Minimum size commonly used.....	30
3. For six-point type of lower standard printing, characteristic of newspapers.....	100
4. For recognizing individual six-point letters or numerals, as in proofreading.....	200
5. For commonly deficient and defective vision. An additional step in the foot-candle scale of effectiveness appears conservative.....	500

also called for concentrated work on exercises and problems. How, then, could the comparison of these materials be made in a more objective way?

This question might be answered by determining the amount of light,⁵ measured in foot-candles,⁶ necessary to read actual samples of material. But there are several factors, or variables, which must be taken into consideration in recommending a standard of visibility for stencil duplicated materials. The actual number of foot-candles of light necessary for a person to read a certain page to the best advantage has not been accurately determined,⁷ as is sometimes supposed, because the variables in measurement cannot be entirely controlled, and the factors of individual differences cause difficulties whenever we would establish what might be called "foot-candle norms." At the present time, zones of recommended foot-candles of light for certain tasks have been established, by means

⁵A recent investigation concerning the importance of light in developing reading skill is given by Ray L. Hamon, "The Effect of Light on Reading," *Peabody Journal of Education*, XVI (Nov., 1938), pp. 145-148.

⁶The foot-candle is a unit of illumination. It is approximately the illumination on a small area of vertical surface one foot from a standard candle.

⁷Matthew Luckiesh and Frank Moss, "Light, Vision and Seeing," *Industrial Medicine* (Oct., 1938).

⁸Matthew Luckiesh and Frank Moss, *The Science of Seeing* (New York: Van Nostrand, 1937), p. 348 ff.

of which it is possible to compare in relative terms the amount of light necessary to equalize the task of reading pages of stencil duplicated material that have print work of various degrees of visibility.

To compare specimens of duplicated material in relation to the reading task involved, what Luckiesh and Moss have determined zones of approximate foot-candles necessary to maintain a given standard of visibility for different reading tasks were used.

Stencil duplicated material is classified with the reading matter grouped in Zone 1. Consequently material of this kind, if comparable to well-printed books in form, clearness of print, distribution of ink, proper spacing, length of line, and vocabulary, can be said to require ten foot-candles of light for a standard degree of visibility. It is material that fits into this zone that is specifically concerned with this problem.

C. Making Specimen Pages

To continue with the experiment, the good and bad specimens of stencil duplicated materials were sorted and sample pages were made to represent each of the two groups in relation to the legibility of print. The reading matter on the specimen pages used in this experiment was copied from *Consumers' Guide*⁸ since this material was interesting to the junior-high-school children who were to be tested. Reproductions of the specimen pages appear here. Sample A represents the good specimens of stencil duplicated material, and Sample B represents the poor examples of material.

D. Measuring Visibility Thresholds

The laboratory was arranged to provide not only normal reading conditions according to foot-candle meters,¹⁰ but also proper inclination of the reading plane¹¹ as accepted in good practice today. Nineteen junior-high-school pupils were selected to test the visibility thresholds of the specimen pages by using the Luckiesh-Moss Visibility Meter.¹² Five practice tests were given with the first set of specimen pages to give the pupils an opportunity to learn how to evaluate visibility thresholds since this form of measurement is somewhat subjective. With the pupils "conditioned" to give accurate evaluations, they were tested to determine the visibility thresholds of the two specimen pages used in the experiment.

Each pupil made four tests of the two specimen pages, determining first the visibility threshold of Specimen A and then that of Specimen B. From these data, ratios of visibility were determined for each person by calculating the means of the ratios calculated from the readings on the visibility meter. The means are tabulated in Column 2 in Table II. Columns 3 and 4 interpret these ratios in terms of foot-candles of light necessary to make the visibility of the specimen pages the same in the evaluations made by the nineteen junior-high-school pupils.

The data clearly indicated that Specimen B, representing the poor samples of stencil duplicated material, was considerably more difficult to see and in every trial required more than twice as much light to have the same visibility

⁸"Feed Buyers Are Lucky," *Consumers' Guide*, Agricultural Adjustment Administration, Vol. V, No. 10 (Oct. 24, 1938), p. 10 ff.

¹⁰The "Sight Meters" manufactured by Chester and General Electric were used.

¹¹Jewell Book Rest.

¹²Engineering Department, Nela Park, Cleveland, Ohio.

WHEN the little pig goes to market to buy a mixed feed for himself he does not buy a pig in a poke. Nor does his owner, the farmer, when he buys mixed feed for his other stock. In 46 of the 48 States today there are feed laws. Because of these feed laws, there is hardly a bag or package of commercial mixed feed sold which does not give feed purchasers the information they need to know at the time they make their purchases.

North Dakota which has a typical feed law, for example, requires this information upon each package of commercial mixed feeds:

1. Name of each ingredient used;
2. Guaranteed minimum amount of crude protein;
3. Guaranteed minimum amount of crude fat;
4. Guaranteed maximum amount of crude fiber;
5. Net weight;
6. Name, brand, or trade-mark of the feed;
7. Name and address of the manufacturer;
8. Maximum amount of peat, humus, or moss;
9. Exact amount of foreign mineral matters and unwholesome feeding materials.

Consumers dashing off to the store to get a box of breakfast food, or stopping in the drugstore on the way home for a tube of toothpaste, might run over such label requirements, and say, "So what! I don't care how much protein there is in my toothpaste, and as for the amount of moss in my breakfast food, why words fail me."

Significantly, however, the descriptive information required for mixed feeds is precisely the information farmers need when they purchase feedstuffs. With it they can buy economically the diet elements they want.

FARMERS buy mixed feed for the nutrients they contain, their proteins, fats, carbohydrates, and mineral salts. In dairy farming, for example, these food elements are fed to cows to increase and enrich their milk production. So when the farmer goes shopping he wants to know how much protein, how much fat, and how much carbohydrate, he is getting in the feed he is buying. The label information tells him the percentage of the important nutrients the feed he is buying contains.

These nutrients, however, cannot be given to animals in their pure form. Thus fiber is necessary in some feeds and is not an adulterant, despite the fact that feeds high in fiber content are less digestible than other feeds. For the farmer's purposes, an excessive fiber content reduces feed efficiency. Other nutrients are added to feeds to meet dietary deficiencies. But the percentage of the important nutrients in the feed is listed on the label. Feed purchasers at least have some idea what they are paying for.

As a further guarantee to farmers, feeds may not by law contain substances dangerous to the health of domestic animals. Together, the positive requirement that the labels list the ingredients in a feed with the percentage of principal nutrients, plus the enjoiner against the use of dangerous substances in feedstuffs, give the buyers of feedstuffs a pocketbook insurance far exceeding any that buyers of foodstuffs get.

Sample A. A well printed instruction sheet which permits of easy and rapid reading.

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Sample B. A poorly mimeographed sheet requires three times the amount of light to read with the same speed that Sample A can be read.

TABLE II. Visibility Ratios of Two Specimens of Stenciled Material and Comparison of Foot-Candle Recommendations

1 Pupil Tested	2 AB ¹³ Eight Readings	3 Foot- candles A	4 Foot- candles B
A	2.2	10	22
B	2.2	10	22
C	2.4	10	24
D	2.5	10	25
E	2.6	10	26
F	2.6	10	26
G	2.6	10	26
H	2.7	10	27
J	2.9	10	29
K	2.9	10	29
L	2.9	10	29
M	3.0	10	30
N	3.1	10	31
O	3.1	10	31
P	3.5	10	35
Q	3.5	10	35
R	3.5	10	35
S	3.7	10	37
T	4.3	10	43

threshold as Sample A which represented the samples of well-done material. The data for individual pupils can be interpreted in the following way. Pupil A requires 2.2 as much light to see the words on Sample B as well as he sees the words on Sample A under the same reading conditions. The same analogy holds true for the other pupils except that different ratios are used. Pupil M needs 3.0 times as much light for Sample B in order to see the material as well as he sees Sample A, while Pupil T requires 4.3 times as much light. It is obvious that the comparison and

interpretation might be reversed by using Sample B as the basis instead of Sample A.

Since the actual number of foot-candles of light necessary for a given task cannot be accurately determined, it follows that the ratios of comparison can be applied only within the foot-candle zones. Now using the data in columns 3 and 4 it may be said that if Pupil A were reading a specimen of good stencil duplicated material comparable to Sample A, in 10 foot-candles of light which is the recommendation for well-printed materials described in Zone 1, the same pupil would have to have 22 foot-candles of light to see material comparable to Sample B as well as he sees Sample A. The same analogy holds true for other pupils except that different ratios are used as shown in Table II.

This interpretation is particularly important since the illumination on desk tops, tables, and wall space in most classrooms will measure about 10 foot-candles of illumination. Hence, it is exceedingly important that stencil duplicated material conforms to the high standards of printed material since in most cases it is being used in reading situations described for Zone 1. Stencil duplicated material of inferior grade will not conform to the situations established for classroom procedure in reading. The comparisons made in the table for Zone 1 would hold true within reason for the interpretation of reading tasks performed under the conditions described for zones 2, 3, and 4 if stencil duplicated material were reduced, by special photographic reproduction, to conform with six-point type instead of twelve-point type.

So far we have considered specific cases of the differences in visibility thresholds. Though nineteen cases with four trials for each specimen is not sufficient sampling to be

conclusive in details, nevertheless, these data condensed into mean and median evaluations offer an aid for more general analysis.

TABLE III. Combined Data of Visibility Ratios

		Foot- candles A	Foot- candles B
Mean of Visibility Ratios	2.96	10	29.6
Median of Visibility Ratios	2.90	10	29.0

The above data based on nineteen junior-high-school pupils' recordings involved 152 trials which indicate that, under similar conditions, about three times as much light is needed to provide the same visibility task for Sample B as is necessary for Sample A. The approximation of the median to the mean shows that the case of Pupil T and the cases of Pupils A and B did not materially affect the average although they represent the extremes of the distribution. It might be said that, according to the data, two to four times more light is needed to give Sample B the same visibility task which Sample A provides under similar conditions, using the visibility measurements determined by the Luckiesh-Moss meter. Consequently a person reading material comparable to Specimen A in approximately 10 foot-candles of light would have to have approximately 29 foot-candles of light on material similar to Specimen B to see the words as well as he sees them on Specimen A. In general, the ratio can be said to be three to one.

In Conclusion

With these preliminary data, the conclusions cannot be far reaching, but they can
(Concluded on page 92)

¹³The ratio B/A is determined by dividing the mean "Relative Foot-candles" recorded for a pupil for Sample B by the mean of the readings recorded for Sample A for each of the nineteen pupils.

THE AMERICAN School Board Journal

Edited by Wm. Geo. Bruce and Wm. C. Bruce

School Board and Teacher Service

THE changes which have taken place during the past three decades in school systems have widened the gap between the school-board member and the teacher. To a great extent this gap has been filled by the superintendent of schools, and in larger cities by the assistant superintendents, the supervisors of special subjects, and the principals.

There was a time when the members of school boards controlled to a great extent the appointment of teachers and when there was a close association of work between the classroom workers and the board members. Even in fairly large cities the latter were acquainted with most of the teachers, and these felt a certain responsibility directly to the board. The teachers were inclined to maintain their contacts with their employers and to bring their grievances to the board members. While this is still true in a few small communities, the present organization of city and town schools requires the teachers to limit the conduct of their business with the school district immediately to the principals and the superintendent. Officially the individual teachers have no ordinary means of coming in contact with the members of the board.

The new situation is the inevitable development from the professionalization of teaching and school administration. And, no one would want to go back to the old days when laymen appointed teachers, ordering their transfer, and determined their promotion. The evils of politics, personal favoritism, and nepotism which the newer plan has eliminated can hardly be calculated. The professional security of the teacher has been enormously advanced by the gradual limitation of the school board to policymaking and to approval of the administrative acts of the school executives and their supervisory assistants.

The improvement has, however, carried with it certain disadvantages that should be changed. There is ample reason for saying that the present administration of the schools is largely autocratic. In spite of their protestations to the contrary, few superintendents have a strong sense of cooperative and democratic action. The practice of some superintendents is to decide and even to act in professional matters and to ask approval of the school board when a retreat is hardly possible. Teachers are consulted too rarely indeed, most generally when problems of salary and promotion are under discussion. When program changes, innovations in teaching method, and similar activities are in hand, supervisors and superintendent are inclined to give orders, and to expect that teachers obey. The teacher who is a strong individualist is likely to have a difficult time if she meets with the disapproval of the superintendent. The board members as individuals and as a group have little knowledge of any except the most outstanding teachers, and the strong individualist is most likely to have an unfavorable reputation in the mind of the board due to her non-conformist attitudes.

The present official gap between individual board members and teachers should be narrowed. The least which the individual board member can do will be to visit the schools frequently and to acquaint himself with their programs, with their methods, and with the general character of the teaching personnel. Upon acquaintance, most teachers—even the individualists and the “organization” leaders—are better understood and their requests more sympathetically and justly dealt with. There is, of course, the danger that the board member who visits schools and who expresses hasty opinions, may become an interfering busybody. But the competent and circumspect man or woman who goes in an inquiring frame of mind, and who desires to learn and to help superintendents and teachers improve the educational service, can do much to overcome the present difficulties and to lead teachers and superintendents—by his own example—into democratic and cooperative administrative practices.

The Schoolhouse and the Neighborhood

AN ENGLISH art critic has remarked that no man builds to himself alone. The buildings in cities belong not merely to their owners; they are so much a part of the lives of those who live in the vicinity and of those who must pass along the streets that they are in a sense owned by the people.

These observations apply with special force to the school buildings of a city, which are actually as well as figuratively owned by the people and which are expected so far as buildings may do so to contribute to the education of the rising generation in all matters personal, social, and civic. That they should directly assist in the aesthetic development of the future citizens is a well-accepted axiom of educators. They cannot do this if they offend both adults and children through bad design, poor materials, insufficient upkeep, and unkempt grounds. Pride in our democracy, respect for its institutions, a regard for the men and women and the programs of instruction that constitute the educational system—these are a necessary part of the success of a democracy and of democratic communities. The beautiful schoolhouse in a well-landscaped and well-kept setting is a fine means to making a visible return to the taxpayer—every citizen—for his contributions to the support of education.

Capital Investment Versus Operation Costs

THE school budget builder is frequently confronted with the question of the relative importance of this or that item of cost. In other words, if the sum total is a fixed fact, it remains to determine upon the raising of some item by lowering another. And here discriminating judgment must come into play.

The conflict usually arises where the relative importance between capital investment and operating costs is under consideration. There are those in every school system who stress the operating costs and minimize the schoolhousing and upkeep of the school plant. Salary cuts are never popular. Supplies and equipment are definite essentials if the operation of the school is to be kept on an efficient basis.

The other side of the picture presents the needs of the school plant. The housing must be adequate, convenient, and safe. Old buildings must be repaired or replaced by the new.

The process of deterioration is continuous. A growing and shifting school population demands new structures.

On the assumption that a new building project is financed by a bond issue and hence does not become a debatable budget item, it still remains that it becomes a part of the total cost of education which is reflected in the tax burden as a whole.

The situation, however, looks entirely different where a school system is conducted on a pay-as-you-go basis, and where the capital investment item takes its place in the yearly budget and rivals with operation cost items. Here the differences of opinion as to the relative merits of the two may become quite acute.

Where the pay-as-you-go plan has been accepted as a fixed policy, no doubt timely provisions guard against harmful cuts on the operation costs. In fact, while the plan has its recognized merits, it fails of its objective if it is carried on to the detriment of the general operation of the school. Therefore, the adjustment must be such that the one will not encroach upon the domain of the other.

Thus, where the pay-as-you-go plan on capital investment is likely to endanger the operation side of a school system the deferred payment plan must be resorted to. It follows finally, that those in charge must be guided by local conditions and the financial conditions in which they find themselves. A good teacher is the first essential of a good school, but a school needs adequate housing before teacher and textbooks can render service. Thus, both schoolhouse and school teacher deserve consideration.

School Supplies in 1939

THE buying of equipment and supplies for school systems is complicated this year by a variety of conflicting tendencies brought on by the general economic situation, by the injection of federal influences, particularly as applied to permanent equipment and furniture, by wide acceptance of the consumer psychology, and by the unwise price-cutting policies of some producers of limited lines. The situation suggests the need of a modification of policies and practices, particularly as these are controlled by the school boards.

So far as methods and results are concerned, the large cities which have studied their problems of buying intelligently are drawing ahead so far of the generality of city school systems that it is difficult to make comparisons. The combination of a policy of seeking the best price after the needed educational utility and quality have been established, with a policy of buying at such times and in such quantities as are most favorable has produced results satisfactory to the educators and to the taxpaying community. It should be noted that the cities which have been most successful have definite plans for setting up educational needs by the educational executives; they insist upon complete specifications; the standards so called are flexible and change as the situation demands; and the entire attitude is one of competent fairness to sellers and to the teacher consumers. In these cities there are as a rule efficient plans of warehousing and distribution, and the accumulation of superfluous stocks is avoided without stinting teachers.

In contrast there have been outbreaks in the press criticizing some school systems for favoritism and other abuses. In more than one city politics has played a controlling part, and

the specifications or conditions of purchase have been and are being so manipulated that orders go to a favored few.

In general, a distinct tendency toward excessive economy is evident, and both schoolmen and school boards are cutting allowances for both quantity and quality of equipment and consumable supplies in order to maintain salaries and staffs. It is certain that this cutting will be regretted as the school year advances.

In contrast to the large cities, there has been comparatively moderate progress among the small cities. In the purchase of equipment and furniture the dealers have been more active in forcing better articles upon the schools than have the school officials in finding and buying them. There has been and still is woeful lack of competency in buying, particularly among the very young educators and among the older generation of school-business officials. The young schoolman, unless he has been so fortunate as to have received his administrative education in one of a dozen colleges, is cocksure and superficial in managing the supplies problem. Many of the older secretaries are notoriously set in their methods and do not aggressively seek out the best available new things. The smaller towns, too, rarely use well-considered specifications; they concentrate their buying in the middle or late summer when prices are certain to be high; they lack a sense of the advantage of quantity and of the necessity for getting service from established houses within the school trade.

For solving most of their purchasing problems, school authorities in both large and small cities seem to need a new sense of balance and a complete change from the feeling of defeat because funds are available for all genuine needs. It seems particularly advisable to accept the fact that the permanent school trade can be depended upon for honest service and reasonable prices, and that there is ultimately no economy in buying from people who do not understand the educational problems and who cannot or will not intend to make good in servicing their own products.

For solving the school-supplies problems, school boards in small communities are in need at this time of help and advice from the state education department. Such help should be more extensive than general bulletins of information; it should include well-balanced standards and specifications, advice on quantity purchases and prices, and a simple testing service. The state school-board associations and the school-business officials might very well establish confidential school-supplies services for their memberships and exchange information on goods and firms. Such services should be constructive and should eliminate the dishonest dealer and unfit goods.

I wish to emphasize again the importance of teaching our pupils the futility, the horrors and devastation of war, and the blessings and benefits of peace. Such instruction does not mean the teaching of pacifism or nonresistance, or the giving up of any rights which we hold sacred. It does not mean that our pupils shall forget that they and their parents are enjoying the full advantage of American citizenship because our forefathers held some things dearer than life itself. — *Dr. Harold G. Campbell, Superintendent of Schools, New York City.*

A good board of education is a board which is better than the size of its community would lead you to suspect. — *Davenport (Iowa) Times.*

Ways to Save on Building Maintenance and Upkeep

Laurence Parker¹

Members of boards of education have the responsibility of spending tax money to the best possible advantage. Of course, there is never enough to do all that is asked—never enough to go around.

One place where rigid economies are often practiced is in the janitor salary schedule. As a result, young men who are energetic, businesslike, and resourceful do not go into janitor work except when compelled to do so by widespread unemployment. This leaves these jobs to older men.

A freight train leaves a railroad terminal with a trained engineer and fireman in the cab. The company has an investment in equipment of from a quarter of a million to half a million dollars in a train. No one would think of suggesting that before this train left the terminal they should let the contract of engine operation to the lowest bidder, who might be a farmer living along the right-of-way. On the other hand, quite frequently the job of maintaining, cleaning, and heating a quarter-million-dollar high school is let to the lowest bidder, even though he is a "farmer" who has never cleaned anything but the stable or the kitchen floor when his wife was sick. Through his ignorance, he can damage plumbing fixtures, allow the building to remain in an insanitary condition, and while ruining the heating plant, endanger the lives of teachers and pupils.

On a quarter-million-dollar high school, the expense for labor and supplies for keeping the building in good condition has been estimated at between 1 and 2 per cent of the building cost per year. The very best of supplies and equipment and reasonable living wages for janitors is taken into consideration in this percentage estimate.

For \$700, a school system can buy a scrubbing and polishing machine of good size, a sander and edger for refinishing floors, and a portable hand sander for refinishing furniture and desks. As a result of such an investment, the appearance of a building can be greatly improved and still keep within the suggested 2 per cent of the cost of the building.

With certain amounts budgeted for janitor salary and maintenance, it is up to board members to get the greatest possible return from the investment. I am hopeful that the following suggestions may be helpful:

A. Building Design Mistakes and Suggested Corrections

1. White entrance doors. For economy of labor and maintenance, entrance doors should be painted brown or gray. White doors cannot be maintained satisfactorily. If the door must be white, a section at the bottom and around the door handle should be painted a darker color.

2. Narrow brick sidewalks. These result in a tremendous packing in of dirt in rainy weather. Walks should be wide enough so that stepping off into the mud will be rare. They should be smooth enough so that they can be swept and kept clean.

3. Too many corners. Round out the corners and curve the baseboards to the floor.

4. Stair steps are costly to sweep. They should be so designed that there are no corners, and the riser should curve into the treads.

5. Many banisters on stairways are dust catchers. Banisters should be solid with smooth finish. There should be a hand rail on both sides for safety.

6. White woodwork is unwise. White is too difficult a color to maintain on woodwork. Varnish on natural wood with a wax finish is recommended.

7. Dust and trash accumulate on lockers and under lockers in hallways. Lockers should be set in the wall.

8. Wainscots are dirt catchers. They should be higher than hand prints usually go. Glazed tile or a good seal on brick, or common tile are advised.

9. Clear glass in classroom doors. It is much better from the maintenance standpoint to have no glass in the doors, or at least to use Florentine glass. In some instances, the door glass may be in small panes with one pane clear for observation.

10. Transoms over doors should be eliminated. It takes too much time to keep them clean.

11. Windows are often inaccessible for cleaning. Many times these windows can be remodeled in such a way that they can be easily cleaned. There should be no diamond panes—just for looks.

12. Many windows are cut up into too small lights. Panes 16 by 20 in. are economical both to replace and to clean. They should be double strength to resist breakage.

13. Window sash is often of metal that corrodes. Nothing equals the old-fashioned wood sash made of well-selected material and kept well painted.

14. Safety devices for window cleaning are too often forgotten. There should be a window jack provided for window cleaners as well as a safety belt and well-installed rings in the window frames when windows are to be cleaned from the outside.

15. Radiators are too close to the floor. Radiators should be up off the floor, hanging from the wall.

16. "Hungry" terrazzo and cement floors are troublesome. Many of these floors need to be carefully sealed and treated with a water wax to improve appearance and save wear.

17. An oil floor is a filth accumulator. The oil should be eliminated from such a floor as nearly as possible and the pores of the floor sealed to the surface. The floor can then be protected with water wax. From that time on, old-fashioned scrubbing can be done away with and the floor will have added life.

18. Cheap hardware is costly. Too many times, an attempt is made to save money on the hardware of a school building. Such so-called economy causes misery so long as the hardware must be maintained. Use substantial hardware.

19. Some buildings have no master keys, others have one master key for all locks. There should be a master key for all class-

room doors. This key should not fit the outside doors. Outside door keys should be closely held to administrators. Teachers' closets should have a lock which the classroom master key will not open.

20. The wrong kind of switches are often used on hallway lights. Hallway lights should have lock switches. In most buildings, savings in light will pay for changes.

21. In some schools it is necessary to call out the fire department to replace lights in chandeliers in auditorium and gymnasium. These fixtures should be arranged for lowering for cleaning and for replacement of lamps.

22. Not enough electric outlets are provided in the baseboards. There should be electric outlets in the baseboards, in the halls, near doors in classrooms, and at intervals in auditorium and gymnasium.

23. Old-fashioned toilet fixtures are nuisances. Stools should be of the wall type and high enough from the floor to make cleaning easy. Full-length urinal with floor sloping in. Drains in the floors should be at the low spot.

24. Lack of ventilation in toilets, shower, and locker rooms is common. Seldom do we find enough ventilation provided.

25. Hidden plumbing and steam lines should be avoided. These lines should be in the open or in easily accessible pipe stacks. Steam lines should be covered to save loss and protect from burns.

26. Storage closets under stairs are criminal. The last place in the world to store supplies and janitor's mops is under the stairs. These places should be cleaned out and permanently closed up or torn out in order to eliminate fire hazards.

27. There should be a janitor's closet with a mop sink on each floor of the building. This should be large enough and well enough arranged so that the janitor can keep it in orderly shape with minimum effort. This should be so planned that he can protect his supplies.

28. Football causes grief to janitors. A football squad tracks in mud by the ton. Showers and dressing room at the stadium or field are recommended.

29. Special events in the gymnasium and auditorium cause tracking throughout the building. A wise use of folding corridor gates will do much to save cleaning and patrolling a building during such events.

30. It is wasteful to heat the whole building for special events in the gymnasium and auditorium. Steam valves should be installed whenever possible in order to cut off steam from the rest of the building.

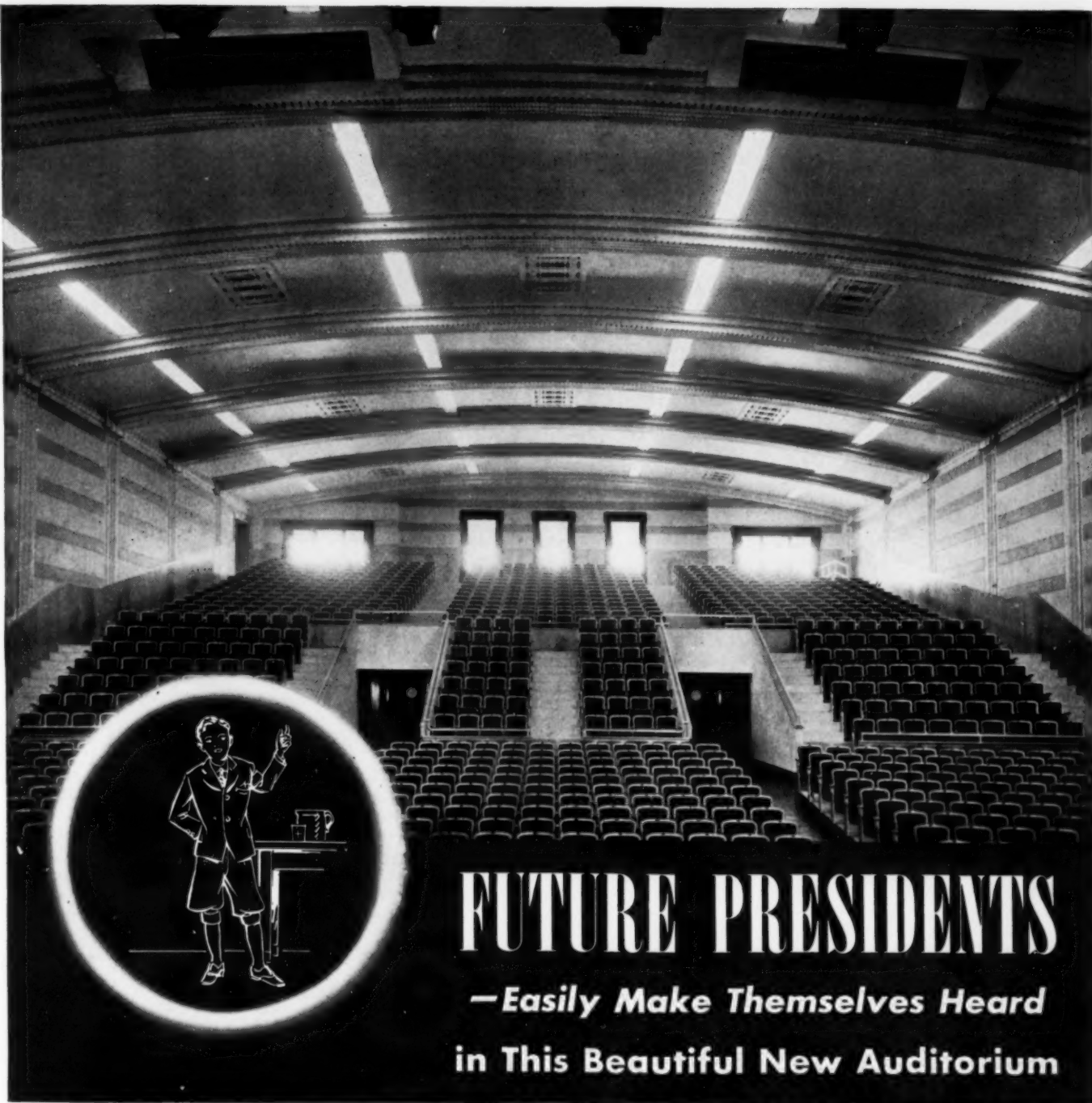
31. No provision is made for getting in touch with the janitor quickly, by the office. There should be a janitor call system and an understanding with the janitor about leaving the building. With our present-day situation of broken homes and perverts at large, children are sometimes kidnaped or enticed away from playgrounds and even taken out of buildings. The janitor should be readily available to assist teachers and principal with such situations.

B. Building-Equipment Mistakes

1. Cheap window shades are bought. Window shades should be of good quality cloth, light tan in color, and should roll up and down from the center of the window.

2. Furniture should be designed for easy and quick cleaning. Chairs should be heavy enough so that they are not easily tipped

¹State Supervisor of Trade and Industrial Education, Pittsburg, Kans.



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Indianapolis Revises Its Salary Schedules

H. L. Harshman¹

In 1927 the Board of School Commissioners of Indianapolis, Ind., adopted a single-salary schedule for the public-school teachers. This schedule provided for (a) a maximum salary of \$2,800 for teachers with a master's degree, (b) a maximum of \$2,550 for teachers holding a bachelor's degree, and (c) \$1,800 to \$2,250 maximums for teachers with no degree, depending upon the number of years of college training. Under this schedule a teacher new to the system received the lowest minimum salary, and in thirteen years if certain training hurdles were passed, could reach a maximum salary of \$2,800 per year. The annual increases were \$100 or \$150 per year.

The salary schedule of 1927 in tabular form is shown in Table I.

Beginning with 1931, the salary schedule of 1927 underwent a number of depression changes. The salary increases were suspended in 1931. In 1932 the schedule was amended, and each year since that it has been re-adopted in its amended form. From 1931 to 1934, deductions ranging from 15 to 19 per cent for classroom teachers were in effect.

Beginning with 1935 and each year up to and including 1939-40, partial restorations and a number of actual increases in salary have been made. The percentage cuts and the flat increases during the period from 1931 to 1938 were all made on the basis of economic necessity and caused the number of different salaries paid to regular classroom teachers to increase from 22 to 62. In order that partial recognition might be given to the training and teaching experience received within the Indianapolis school system and to provide more uniformity in compensation the board of school commissioners has now adopted a new salary schedule for the calendar year 1940. This scale involves 24 salary steps and is in operation as in Table II.

Under the new schedule, teachers' salaries for the calendar year 1940 will be computed as follows:

1. Determine, by the above scale, the salary to which the teacher would be entitled through the addition of four years of service to the present length of service in the Indianapolis public schools.

2. Subtract the present salary from the salary the teacher would be entitled to through the addition of four years of service.

3. This increase to be divided by 4 to

¹Director of Administrative Research, Indianapolis Public Schools.

Table II. Schedule of 1940—Salary Steps

No. Years Experience	Salary	
24	\$3,000	Maximum for M.A. Degree
23	2,950	
22	2,900	
21	2,850	
20	2,800	
19	2,725	
18	2,650	Maximum for A.B. or B.S.
17	2,575	
16	2,500	
15	2,400	
14	2,300	
13	2,200	Maximum for no degree
12	2,100	
11	2,000	
10	1,900	
9	1,800	
8	1,700	
7	1,625	
6	1,550	
5	1,475	
4	1,400	
3	1,350	
2	1,300	
1	1,250	

get the annual increase for the calendar year 1940, subject to the limitations in the following paragraph.

4. The increase as computed in paragraph 3 to be added to the present salary of the teacher and the 1940 salary of the teacher to be placed at the point nearest to this sum on the salary scale as adopted. Provided that no teacher without a degree can receive in excess of \$125, with a bachelor's degree in excess of \$175, and master's degree in excess of \$200.

If the increase is in excess of these limitations, then the teacher's salary for the calendar year of 1940 must be placed on the scale at a step which will conform to these limitations.

The adjustments and restorations of salary subject to the approval of the Indiana State Tax Board will go into effect January 1, 1940. The amount of the adjustments and restorations will total approximately \$220,000, during the calendar year, 1940, of which approximately \$132,000 will be appropriated in the budget for the school year 1939-40. The remainder of the restoration total will be included in the estimated expenditures for the balance of the calendar year, 1940.

Table I. Indianapolis Salary Schedule for 1940

Range of Schedule	Group A Two Yrs. Training	Group B Three Yrs. Training	Group C Four Yrs. Training	Group D A.B. Degree	Group E A.M. Degree
Salaries					
1. \$1,300	\$1,300				
2. 1,400	1,400	\$1,400			
3. 1,500	1,500	1,500	\$1,500		
4. 1,600	1,600	1,600	1,600	\$1,600	
5. 1,700	1,700	1,700	1,700	1,700	\$1,700
6. 1,800	1,800	1,800	1,800	1,800	1,800
7. 1,950		1,950	1,950	1,950	1,950
8. 2,100		2,100	2,100	2,100	2,100
9. 2,250			2,250	2,250	2,250
10. 2,400				2,400	2,400
11. 2,550				2,550	2,550
12. 2,700					2,700
13. 2,800					2,800

It was necessary that the salary schedule be made effective beginning January 1, 1940, because the school city system does not have a working balance, and to start restorations in September would require appropriations in excess of funds available for the period from July 1 to December 31, this year.

Beginning January 1, 1940, all teachers will receive adjustments in salary, of which the average restoration will be approximately \$10 for each school month. However, the restorations will vary in accordance with the principles of equalization, and recognition of the length of service and amount of training.

AN EXPERIMENT IN STUDENT SELF-GOVERNMENT

On the third Friday in January, 1939, Mr. H. S. Thompson, superintendent of schools at Excelsior Springs, Mo., informed the student body and teachers that he would like to conduct an experiment in student government some time before the school year closed. The teachers, secretaries, and principal would have the day off.

A short time later, the student council informed the superintendent that they would like to have charge of the high school on April 4. Following the selection of the date, the student body proceeded to elect a student board of education, which in turn selected a superintendent, a principal, and teachers for the day.

On the day appointed, a number of citizens of the city were invited to attend the school session. This was done not as a publicity stunt, but to show that the present generation is equal in ability, maturity, and character to any in the past and that the young people can and will assume responsibility if given the opportunity.

The school session, under the direction of the student council, was carried out very successfully, without any advice or planning on the part of the teachers. As a result, the word *discipline* has been dropped, and the faculty is learning to live with and enjoy their students and is giving them responsibilities. It is planned to make this a yearly event in the high school.

ENCOURAGING CO-OPERATION

The principal of the high school at Salem, N. J., regularly accompanies the superintendent of schools at meetings of the board of education. The principal "sits in" for the purpose of providing first-hand information on problems relating to the high school, its teaching personnel, its program of work, etc.

The practice has been found particularly successful because the members of the board of education and the superintendent are brought closer to the problems of the high school, while on the other hand, the principal has become appreciative of the financial and administrative problems of the schools as a whole, and of the necessity of justifying his practices before the representatives of the community.

THE TEACHER'S SYMPATHY

A teacher's one greatest asset is sympathy, the power to feel with his pupils and put himself in their places. Tasks which seem easy to the teacher are hard for the child. Without genuine sympathy one will never become a good teacher. — H. H. Lowrey, Fordson, Mich.

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School Administration in Action

FORDSON SCHOOL BOARD ADOPTS NEW CONTRACT FORM FOR TEACHERS

The Fordson board of education at Dearborn, Mich., has adopted a new contract form for teachers, which specifies that any teacher under contract at the present time, who has rendered two or more years of satisfactory service in the school district, may be granted tenure immediately upon reappointment by the board.

A successful applicant for a teaching position will be placed upon the eligible list of teachers and given the status of probationary tenure.

After a probationary period, each teacher will be given a written contract stating the total monthly salary to be received and the minimum number of school weeks or months covered by the contract.

At the end of the first year of service, any teacher who is not rendering efficient service may be notified with a definite statement by the principal, with the approval of the superintendent, at least 60 days before the close of school, setting forth the reasons why his or her work has been judged unsatisfactory. Such a teacher may be continued upon probationary tenure for a second year, during which time it will be the duty of the principal and superintendent to determine through diagnosis and intensive supervision whether improvement is possible. Whenever a teacher fails to show the desired improvement after a year of careful training, then such a teacher, upon the recommendation of the principal and superintendent may be dropped from the eligible list and her contract terminated.

Under the rules, all teachers are entitled to a hearing by the board before dismissal. Whenever a hearing is provided, written charges against the teacher must be filed with the secretary of the board by the superintendent not later than 60 days before the close of the school year. Upon the request of the teacher, a meeting of the board must be held not later than thirty days before the close of the school year. At least seven days' notice of the date of such meeting must be given to the teacher.

The board, upon recommendation of the superintendent, will grant a leave of absence of one year, without pay, to teachers for the following reasons: (a) for advanced study in an educational institution of recognized standing; (b) for travel for educational reasons; and (c) for reasons of health.

THE COLUMBUS, OHIO, SCHOOL SURVEY

In a 129-page document, containing 15 maps and 59 tables, the school-building situation of Columbus, Ohio, is lifted into a graphic picture which leaves no reasonable question concerning the physical and educational status of the school plant unanswered, and makes specific recommendations for (a) bettering the present school buildings and equipment, (b) for making additions to buildings and erecting new buildings, (c) for financing the program.

The survey makes an exhaustive analysis of the school plant, which now consists of 5 senior high schools, 11 junior high schools, and 49 elementary-school buildings, 6 portable

centers. Their present utilization, the play areas, and the landscaping also received attention. Forty-nine classrooms were rated unsatisfactory.

The text provides a historic background of the school system and of the city, cites its populating growth, its birth and death rate, industrial, commercial, and building employment, and the rate of illiteracy. The maps, tables, and figures bring out the essential information on zoning districts, school enrollment, number and character of school buildings, school costs, tax evaluations and school bonded debt, comparisons with other Ohio cities of over 100,000 population, etc.

In summarizing the standing of Columbus among her sister cities of the state the investigators hold that it occupies a middle position, that 5 of the 8 large cities have a higher per pupil bonded debt than Columbus, and in current school expenses Columbus is lower than the 8 larger cities. In total income the school system has been sharply cut since 1930 although the school enrollment has increased.

The definite recommendations are that 23 schools require new heating plants; 11 new toilet fixtures; 23 site additions; 18 assembly-room provisions; 7 improved artificial lighting; 18 roof and gutter repairs.

The program contemplated will involve the expenditure of \$1,415,000 for new buildings and additions, \$800,000 for new sites and additions to sites, \$1,312,000 for essential modernization of heating plants, toilets, floors, lighting, etc.; \$174,250 for needed educational equipment. The total necessary expenditures are fixed at \$3,701,250. It is recommended that a one-mill tax levy for a five-year period be submitted to the voters.

The survey was made under the direction of the Bureau of Educational Research of the Ohio State University, under the direction of Prof. T. C. Holy and his assistants, Earl W. Anderson and H. H. Davis. The director received no compensation since the Ohio State University furnishes his services free to boards of education in Ohio.

TWENTY-EIGHT YEARS A SCHOOL DIRECTOR

The Record of James D. Rutledge of Johnstown

Unique and interesting is the record of School Director James D. Rutledge in Johnstown, Pa.

Mr. Rutledge was first elected to the board of school directors in 1911 to complete four years of a six-year term, and took the oath of office the first Monday of December. In November, 1915, he was elected for a six-year term and has been re-elected for similar terms in 1921, 1927, and 1933. This year he will complete 28 years as a board member, and he has served 24 of the 28 years as president. The board has completely changed during this time, but each succeeding year the other members elected him to serve as president.

From a high-school graduating class in 1915 of 135 the number has increased to 736 graduated June 2 of this year. Under his leadership a large building program was consummated to care for the increased enrollment. A senior high school was built in 1926, which will receive in September 955 students who graduated from three junior



Mr. James D. Rutledge
School Director, Johnstown, Pennsylvania.

high schools this year. Two of the junior high schools along with four modern grade-school buildings were built within the past sixteen years.

This year as usual, Mr. Rutledge signed a total of 1,691 diplomas for the four high schools and personally presented them to the classes. He has signed and presented more than 22,000 diplomas during his presidency, including four children of his own, as well as his first grandchild, Ann Rutledge, who graduated this year.

A school system with 30 buildings worth seven millions, 465 teachers, 14,000 day students, and 1,200 evening-school pupils, with an annual pay roll of more than one million dollars is a big business and requires much of the time and energy of board members but even more of the president.

Mr. Rutledge is a modest man who heads one of the largest produce firms in the city, is president of its largest building and loan association, is prominent in church activities, and finds time to take part in many civic affairs.

He was rescued from the flood of 1889 when many perished, and he sustained severe business losses in the St. Patrick's Day flood of 1936 when thirteen school buildings were badly damaged. His is an outstanding record of service to the community which shows his interest in the boys and girls of the "Friendly City," as Johnstown is familiarly known.

COMING CONVENTIONS

July 10-21. Department of Elementary Principals, N. E. A., at University of California, Berkeley.

July 17-21. Administrative Officers of Public and Private Schools, at Chicago, Ill.

Aug. 15-17. World Congress on Education for Democracy, at Columbia University, New York.

Aug. 21-25. American Federation of Teachers, at Buffalo, N. Y. Irvin Kuenzli, Chicago, secretary.

September 28-29. California School Trustees Association, at Oakland.

CONFERENCE OF FOOD SERVICE DIRECTORS

Announcement has been made of the fifth annual Conference of Food Service Directors, to be held November 2, 3, and 4, in Baltimore, Md. While the conference is devoted to the broad general field of food administration, special attention will be given to the subject of school lunches.

Information concerning the meeting may be obtained from Miss Alma Bering, chairman of the publicity committee, Towson, Md.



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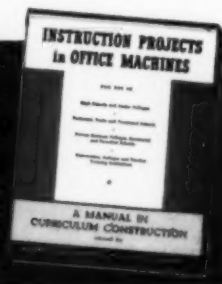
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School Law

Permanent Teacher Cannot Be Suspended

A teacher employed for more than five years as principal of a school in Richmond County, Ga., who had been re-elected following the adoption of the teacher tenure law, and without being placed on probation, is permanently elected under the law, according to a decision of the Georgia State Supreme Court.¹

Teacher Entitled to Protection of Tenure Law

A Pennsylvania teacher, notified of the termination of her contract effective at the end of the school term, was a professional employee on the date of the teacher tenure law, and hence the teacher was entitled to protection of the law, notwithstanding that illness prevented her from performing her services on the effective date of the law.²

Teacher Can Be Dismissed for Valid Reason

A school board in Pennsylvania dismissed a teacher and abolished the department for valid reasons, including financial ones, in the interest of a more efficient system. The State Supreme Court has ruled that such a teacher may be dismissed without consideration of seniority, notwithstanding that abandonment is not within the causes for dismissal contained in the teacher tenure law of the state.³

Court Will Not Interfere

The State Supreme Court of Colorado has ruled that, in the absence of gross abuse of discretion, a court may not interfere with the school board's dismissal of a teacher.⁴

¹Board of Education of Richmond County v. Young, 1 Southeastern reporter (2d) 739, Ga.

²Shaffer v. Johnson, 5 Atlantic reporter (2d) 157, Pa.

³Ehret v. School Dist. of Borough of Kulpmont, 5 Atlantic reporter (2d) 188, Pa.

⁴Ruger v. Knight, 88 Pacific reporter (2d) 118, Colo.

Vocational Director Cannot Sue for Salary Difference

A director of vocational activities, who had been promoted to the position, and whose salary had been fixed by the board of education independently of the school board's bylaw providing rules for fixing salaries, and who had been promoted from a lower position, could not sue for the difference between the salary paid him and the amount of the salary as computed under the law, under a decision of the New York Court of Appeals.⁵

Principal Not Held Liable for Pupil's Injury

In an action against the principal of a public school for injuries sustained by a pupil who fell on an exterior stairway, the New York Appellate Court had ruled that there could be no recovery against the principal because the evidence showed that he had exercised such general supervision as was possible.⁶

State Course Must Be Taught

The Pennsylvania Supreme Court has ruled that courses of study prescribed by statute must be taught, and that the teaching of such courses cannot be discontinued, either by the state council of education or the school board.⁷

Administrative Body Must Determine Policies

Public-school policies must be left to the discretion of administrative bodies to meet changing times and educational concepts.⁸

Teacher Not Liable for Injury

The Massachusetts court of appeals has ruled that where a teacher in a vocational school taught

⁵Loewy v. Board of Education of City of New York, 10 N. Y. S. (2d) 930, N. Y. Sup.

⁶Thompson v. Board of Education of City of New York, 19 Northeastern reporter (2d) 796, 280 N. Y. 92, reversing 6 N. Y. S. (2d) 921, 255 App. Div. 786.

⁷Ehret v. School Dist. of Borough of Kulpmont, 5 Atlantic reporter (2d) 188, Pa.

⁸Ehret v. School Dist. of Borough of Kulpmont, 5 Atlantic reporter (2d) 188, Pa.

subjects related to the cabinetmaking course and gave students permission to make a body post for an automobile, using a band saw, the teacher cannot be held liable since there was no relation of "employer and employee," and the teacher was under no obligation to furnish the student a safe machine, particularly when there was no evidence that the teacher was negligent in permitting the use of a machine that was out of order.⁹

Teacher Not Negligent

Where there was evidence at some undetermined time earlier in the morning, but after a student had begun using a band saw, that the edge of the blade was running over the wheel, there was no evidence that the teacher may be charged with negligence in permitting a student to operate the band saw.¹⁰

♦ Attorney General Walter R. Johnson, of Nebraska, has ruled that school districts are not liable for injuries to athletes not covered by a limited insurance policy.

The attorney general was of the opinion that in Nebraska a public-school district is not liable for injuries suffered by anyone, except its employees, under the workmen's compensation act.

♦ An interesting case was recently decided by a Cincinnati court. The city filed an assessment claim against the Cincinnati board of education for boulevard lighting about school buildings of \$745.48. The court decided in favor of the city. The case in hand covered only the Withrow High School and the Oakley School. The decision will have a bearing on eighteen other boulevard lighting projects affecting the schools. The board of education, contending that school property is exempt from taxation and that boulevard lighting confers no special benefits upon school property, will appeal the case to the Ohio Supreme Court.

⁹Fulgoni v. Johnston, 19 Northeastern reporter 2d 542, Mass.

¹⁰Fulgoni v. Johnston, 19 Northeastern reporter 2d 542, Mass.



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School Building News

PROTECTING SCHOOLS FROM FIRE

Despite constantly improving construction and management, five fires take place every day in American schools, and the loss of life in these fires is greater than in any other class of occupancy.

The Newark Safety Council, 24 Branford Place, Newark, N. J., in an attempt to reduce this tragic loss of life, has called attention to ten points which may well be observed in the interest of safety from fire. These are as follows:

1. Make sure that, in event of fire, the building will be emptied quickly and students removed from danger without delay.
2. Reduce the amount of inflammable liquids kept in the building to the minimum and store those that must be retained in fire-resistive lockers or cabinets.
3. Do not allow papers and inflammable rubbish to accumulate anywhere in the building, except in safe storage rooms.
4. Store oil-soaked and paint-soaked rags and waste in metal safety cans until they can be removed and disposed of.
5. Provide fire blankets in all chemical laboratories and domestic-science kitchens and make sure that the instructors know how to use them.
6. Place approved fire extinguishers of the right type in all laboratories, trade shops, cafeterias, boiler rooms, and other places involving special fire hazards.
7. Protect storerooms containing large amounts of inflammable materials, such as paper, lumber, and furniture, with automatic sprinkler systems.
8. Inspect electrical and heating systems frequently and correct hazardous conditions.
9. Exercise a rigid control over smoking.
10. Train a group of employees, instructors,

and older students in the use of fire extinguishers, and in other fire duties by organizing a fire brigade and holding frequent fire drills.

BUILDING NEWS

♦ Topeka, Kans. The board of education has approved plans for the new State Street School, to cost \$178,000. Cuthbert & Suehrk are the architects.

♦ Fairfield, Iowa. Construction work has been started on the new high school, to cost \$500,000.

♦ Barberton, Ohio. Contracts have been let for the construction of a new school, to cost \$381,000.

♦ Milwaukee, Wis. Contracts have been let for the construction of the Manitoba-Dakota School, to cost \$133,500.

♦ Nashville, Tenn. The contract has been let for the construction of the new Buena Vista High School, in North Nashville, to cost \$344,000.

♦ Nelsonville, Ohio. The board of education has recently completed a recreational project, involving the construction of an athletic field and playground area. The stadium, which seats 1,800 persons, is equipped with a swimming pool, and cost complete \$115,000. It has been named the Arnold Field, in honor of Supt. E. J. Arnold, who was largely responsible for the undertaking.

♦ Nacogdoches, Tex. Construction work has been started on a junior-senior high-school building, to cost \$320,000.

♦ Ortonville, Minn. The cornerstone has been laid for the new gymnasium and auditorium for the high school, to cost \$100,000. The building will be erected with the aid of PWA funds.

♦ Cleveland, Ohio. Construction work has been started on six school additions. The projects are part of a \$4,500,000 school-building program, calling for eighteen additions.

♦ Bartlesville, Okla. The board of education has recently completed three school-building projects, comprising the Douglass School, at a cost of \$28,000; the Highland Park Elementary School, at a cost of \$15,000; and the McKinley

Elementary School, at a cost of \$450,000. A new high-school and junior-college building is being erected, and will be completed at a cost of \$450,000.

♦ Kenton, Ohio. A new high-school building now in process of erection, will be completed in November, 1939, at a cost of \$300,000. The old high-school building, to be remodeled at a cost of \$35,000, will be used for grade-school purposes.

♦ Wellston, Ohio. The board of education is completing an extensive school-building program, which has completely modernized the school plant. Gymnasium and auditorium facilities have been provided in each grade- and high-school building. Among the projects completed are a ten-room elementary-school building, a shop addition for the senior high school, providing equipment for six units of work, a combination auditorium-gymnasium for the South School, and an auditorium-gymnasium for the Harvey Wells School.

SCHOOL-BUILDING CONSTRUCTION

During the month of May, in 37 states east of the Rocky Mountains, Dodge reports contracts let for 315 educational buildings, to embrace 2,259,000 square feet of floor space, and to cost \$16,414,000.

During the month of May, in 11 states west of the Rockies, contracts were awarded for 19 new school buildings, costing \$1,325,550.

In the same territory, west of the Rockies, 15 additional buildings were reported in preliminary stages of preparation, at an estimated cost of \$769,000.

SCHOOL-BOND ISSUES

During the month of May, school bonds in the amount of \$13,688,810 were sold. The average interest rate reached a new low of 2.26 per cent.

During the same month, short-term paper, warrants, etc., were sold in the amount of \$2,544,843.

Modernizing Plumbing in a Rural School

Norman J. Radder¹

The installation of an electric water system and adequate plumbing equipment in rural schools is a sound investment in health, according to Robert Zinkgraf, principal of the Silver Creek School, two miles west of Random Lake, Wis. This opinion is based on his personal observation of the health of forty pupils, following the modernization of the Silver Creek School.

Until the recent modernization program was undertaken, there wasn't even a well on the school property. All of the water for

impossible for the teacher always to see to it that the children wear their sweaters or jackets. Too often they go out without their wraps.

"The result was that nearly every child had three or four severe colds every winter. With their resistance lowered by exposure, the children fell an easy prey to illness, particularly diseases of the respiratory tract. In contrast, we have not had a single child ill with a cold during the first three months of the present school year. I am convinced that this remarkable freedom from illness is directly attributable to the indoor plumbing."

The sanitary remodeling of the Silver Creek

leadership in this all-important duty of keeping the public informed has been frequently noted." School administrators are beginning to recognize the importance of the issue and leaders in the field are beginning to do more about it.

Several cities have been issuing a newspaper or periodical of some kind. There are also well-known publications by state departments and universities but county publications are almost unknown.

Dr. Lou's J. Kaser, County Superintendent of Burlington County, N. J., has been doing an outstanding piece of work not only in developing a good school system, but also in the matter of public relations. Of course, the one is largely responsible for the other. For over eleven years the *Burlington County Educational News* has been coming out regularly every month. It is a county school newspaper. At first there were only four pages; now there are eight. There is very little advertising and lots of school news from every corner of the county; also important school news regarding the state and the nation.

There are no one-teacher and few two-teacher schools in Burlington County, the largest and most rural county in the state. It has been outstanding in the matter of consolidation and transportation. The *Burlington County Educational News* has been a strong advocate for consolidation and efficient transportation.

While there is very little advertising and the subscription is only fifty cents per year, the paper is self-supporting and it is sent to everyone in the county who has anything to do with the schools such as teachers, principals, superintendents, school-board members, legislators, and truant officers.

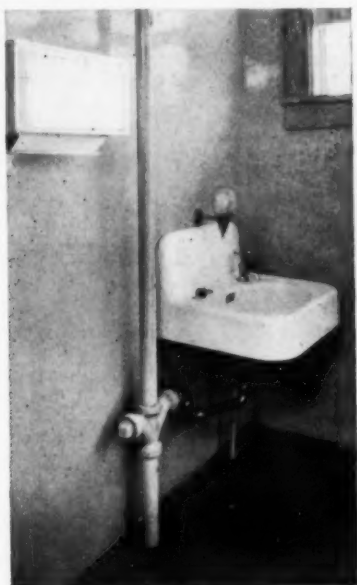
A HIGH-SCHOOL PARENTS' NIGHT

Panoramic View of Instructional Work

The Surrattsville High School at Clinton, Md., recently held a Parents' Night as a panorama of its work in the past scholastic year. The program was not designed for entertainment, but merely as a revelation to the people of what the new program is attempting to do, and the success which is in some measure resulting.

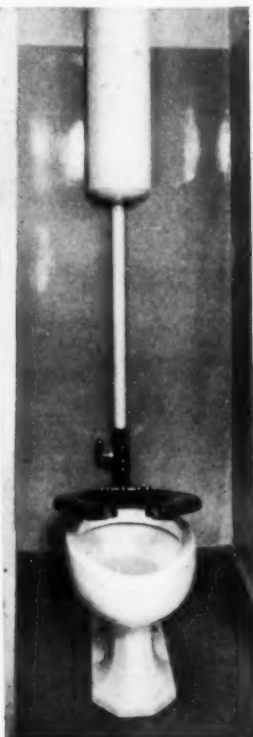
The need for the program was evident. First, a number of school patrons had recently moved to the community from distant points. Second, an increase in enrollment had resulted in a more enriched program than had been known for a long time. Third, the patronage area includes many communities rather than a few as was formerly the case, so that some well-planned means of reaching parents is necessary.

The program was sponsored by the principal, Mr. T. S. Klein, aided by members of the staff representing the school newspaper, industrial arts, science club, style show, glee club, orchestra, manners club, and social studies. Each member of the junior class prepared a paper entitled, "What I Owe America and What America Owe Me." From a large group of students, one pupil was chosen to present the paper. The Manners Club staged an assembly program featuring their work. One number was a short play entitled, "Charlie Learns About Good Manners." The home-economics department presented its year's work in the form of a style show featuring the sewing projects of the classes. To the music of piano and violin, each girl modeled the article she herself had made. Then followed an account of the show read by one of the students as each dress was modeled. One of the students was chosen to present the summary of the activities of the science club, with an account of poisonous gases and chemical warfare. A skit on industrial arts was presented by several members of the industrial-arts department, showing the value of industrial arts and the opportunities afforded students who take it. The physical-education program was made of a variety of stunts in physical activities, stressing co-ordination of body muscles and sports adapted to weak and strong students. Under the direction of the teacher of journalism, the junior class got out a special two-page edition of *The Owl*, the school newspaper. The work is done by the junior students before taking on the regular duties of the senior year.



Left: Handwashing is made convenient and attractive by modern lavatories well equipped with liquid soap and paper towels. Full responsibility for keeping the boys' washroom clean is assumed by a boy who is elected monitor for two weeks. The girls follow the same procedure.

There is a spirited rivalry between the boys and girls to see which washroom is cleanest. Middle: For many years water had to be carried to the Silver Creek school in pails. Now pure cold water from a deep well may be had in the corridor bubbler. Right: Indoor toilets in both boys and girls washrooms have resulted in a noticeable improvement in health. The fixtures are of the seat-action, water-saving type.



drinking and hand washing had to be carried from a neighboring farmhouse. A gallon of liquid soap lasted a school year. Now a gallon is used in two months, a 350 per cent increase in soap consumption which is a fairly accurate indication of the increase in hand washing.

An abundance of water is needed by growing boys and girls. When the water at the Silver Creek School stood out in pails, it became warm and tasteless, and was often contaminated by dirt from the children's jackets while they were carrying the filled pails to the school. Since the installation of the water system, the children are drinking pure water freely, now that it is available, fresh and cold, from a sanitary bubbler.

"Going outdoors in subzero weather is a severe hardship on children, particularly the younger ones," Mr. Zinkgraf explains. "It is

¹Director, Plumbing and Heating Industries Bureau, Chicago, Ill.

School cost \$2,115, including the plumbing, the well and the pump, and the necessary structural alterations to the building. In all the board spent about \$2,700 for changes in the building and on the school grounds.

A COUNTY SCHOOL NEWSPAPER

Ernest C. Witham¹

In a recent unpublished study fifty graduate students were given a list of twenty-six phases of school administration with instructions to mark those phases that were being well taken care of and those being poorly handled in their own schools. As a result, public relations (one of the items), fell into twentieth place. That is, of the twenty-six items, nineteen of them were being handled better than public relations. Nearly everyone seems to agree that the schools are not being very well interpreted to the public. John E. Grinnell says "The dereliction of educational

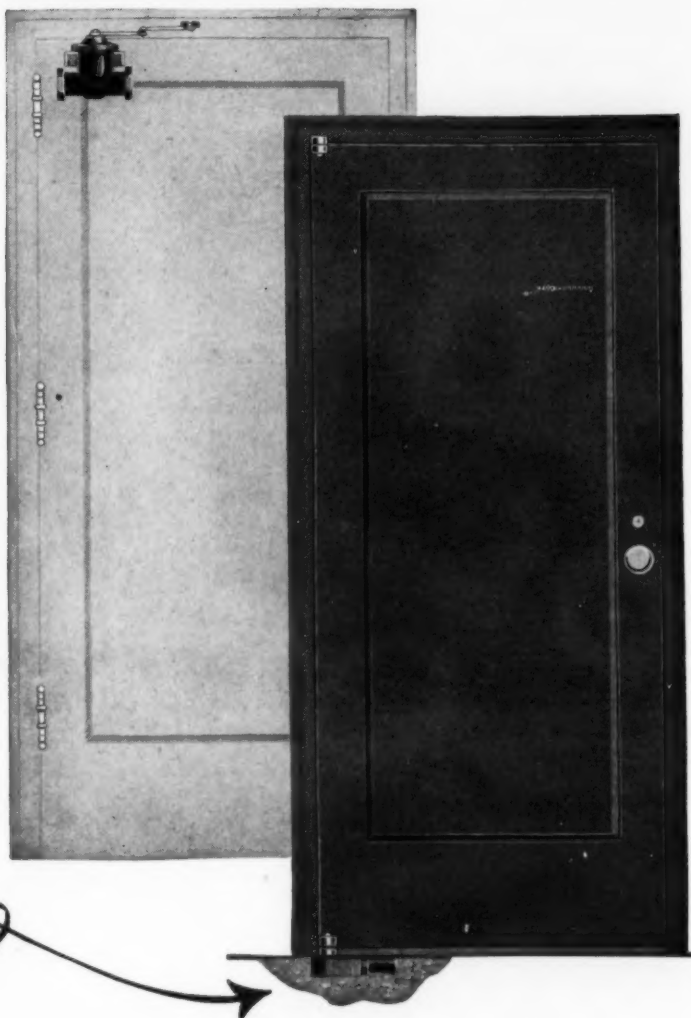
¹Associate Professor of Education, Rutgers University.

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THIS clever kindergarten floor of Armstrong's Linoleum gives teachers a helping hand by keeping basic numbers before the children's eyes. Teachers and pupils alike find an attractive colorful linoleum floor makes the classroom a far more pleasant place in which to work.

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School Board News

DULUTH REPORTS PROGRESS IN SCHOOL-BUSINESS ADMINISTRATION

System Declared to be Streamlined

In spite of depression and serious local difficulties, the board of education at Duluth, Minn., has for three years past, balanced its budget, raised the wages of teachers and other school employees, paid off debts, and extended the teaching service of the school system to children and adults. How this was accomplished is told in an extended news story in the *Duluth News-Tribune*, for May 28. The story, based on statements of Supt. Dr. H. H. Eelkema, makes clear that from a tangle of bond floatations, high tax levies, interest charges, and restitution suits, to which the present board of education fell heir, the serious problems of the schools have been largely met by following a sound monetary and business policy.

In the three-year period from August, 1936, to August, 1939, school bonds in the sum of \$1,018,000 have been retired. Other securities optional for payment have been refunded at lower interest rates. Thus, the interest on an issue of \$300,000 has been reduced from 4.75 per cent to 1.375 per cent.

Courses in mechanic arts have been revamped to come within the provisions of the Smith-Hughes law and to receive both federal and state aid, realizing for the current year more than \$12,000.

The practice of issuing interest-bearing school orders in anticipation of tax receipts, has been modified to reduce the interest rate from 6 per cent to 2 per cent, and to eliminate the orders so far as possible. The interest on floating indebtedness in 1934-35 was \$28,172, while in 1932-33 it was \$63,914. During the past year remodeling and new construction, involved expenditures of

\$251,330, of which 45 per cent was received from PWA.

Similar economies were made in the business management of the school system through close buying, reductions in the cost of administration and building management, etc. The budget for 1938-39 was \$2,580,000, ample to pay all of the expenditures necessary. Some of the increases were effected in a boost in the mill rate to offset reduced property valuations.

Wages of teachers, principals, janitors, and maintenance men have been increased during the past year by nearly 14 per cent, and wages of the clerical workers have grown by 12 per cent. The instructional service has involved the introduction of a broad vocational program, including a variety of courses ranging from printing to carpentry. In addition, night-school courses have been set up in such subjects as steam engineering, welding, vocational mathematics, and naturalization courses.

During all this time there has been no lack of attention to the improvement of the service in the grades and in the high school. The percentage of failures throughout the system has been reduced, and eight teachers have been employed for various types of remedial work. The music department has been entirely revamped and a careful program of improving curriculums, etc., has been carried on. Superintendent Eelkema maintains that the board of education has been enabled to do all this because it has followed sound business practices.

MODERN SCHOOL LIGHTING REDUCES NERVOUS STRAIN AND FATIGUE

A new school lighting system recently installed in the Edgeworth School, Edgeworth, Pa., has been found effective in reducing nervous strain and fatigue among pupils and has created a more pleasant atmosphere in the classroom.

In the Edgeworth School, the installation was made after the school officials had become con-

vinced of the advantages of the trial installation. All of the rooms are equipped with the Westinghouse luminous indirect luminaries, designed to minimize glare and eliminate sharp contrasts.

Mr. J. W. Cameron, supervising principal of the Edgeworth Rural School District, in endorsing the system said: "Our new lighting fixtures are especially effective in dispelling the gloom of dark days, and light meter readings show that the actual light intensity has been increased. There is less evidence of nervous tension, less fatigue, and a more relaxed attitude which creates a more favorable situation for performing school tasks."

TEXTBOOK REPAIRS

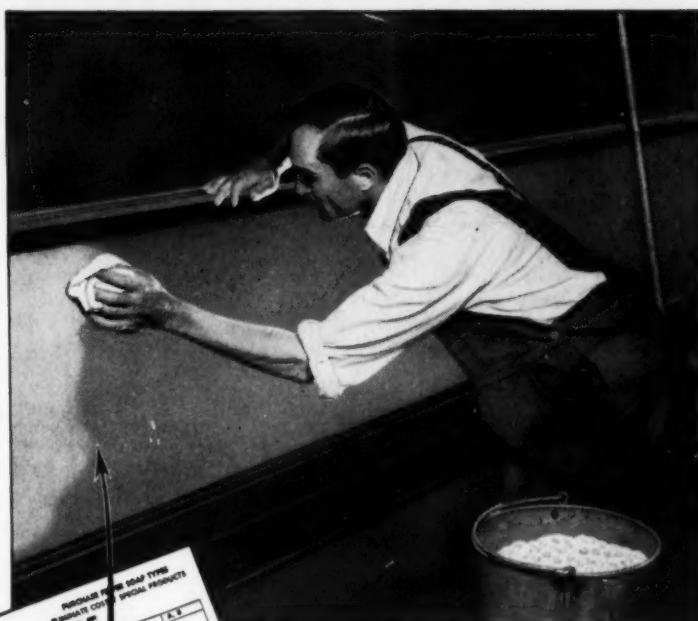
The business department of the public schools of Sioux City, Iowa, conducts each summer, a program of textbook repairs in charge of a textbook crew. In order to provide uniformity of judgment and inspection, all library books and textbooks are made accessible in some one room of each of the school buildings. In buildings where there is a central book storage room, all textbooks are shelved in accessible manner for examination purposes. Library books are similarly collected in a central, preferably a north classroom, or the auditorium. The library books are separated according to grade and are marked so that they may be returned to the respective classrooms with a minimum of handling.

Before the close of the school year, all principals and teachers were requested to check books in their possession, particularly to discover missing pages, tears, etc. Teachers were not permitted to destroy or dispose of books. This latter job was retained entirely for the book-repair crew.

In each building a complete inventory of textbooks is prepared by the principal and teachers and made available to the book-repair crew. Principals also make available in writing all special directions which they consider of help to the book-repair crew, particularly to make clear special conditions in the respective buildings.

HOW YOU CAN *Save* ON YOUR SUMMER CLEANING BUDGET

You can avoid much refinishing this summer and save money by *cleaning*, instead! This FREE Cleaning Chart tells how to get better results *faster*. It is bound to make your budget go further.



CLEANING WALLS—this Chart tells the best soap to use for cleaning all types of walls—whether moderately soiled or very dirty. It also tells how to make the best use of the soap. *Saves much repainting.*



CLEANING FLOORS—refer to this Chart before cleaning floors. It tells which soap cleans floors best—any type, any condition. This C. P. P. Chart saves you time and materials—because the most efficient soap is recommended for each type of floor.

CLEANING WOODWORK—a glance at the Chart shows how to get best results when cleaning woodwork—painted, unpainted, varnished—every kind! Tells the correct soap—and how to use it. Saves your cleaning staff time and labor.



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It's easy to install Palmolive Dry Soap Dispensers . . . but special "one-way" screws prevent their being removed by mischievous children. Available in transparent glass, or all-metal containers. Also new "basin-bracket" model.



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Please send me your School Cleanliness Guide.
I understand there is no obligation.

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ONCE you compare the Liqua-San soap system with the system you now use, you'll see immediately why an ever-increasing number of schools are switching to Liqua-San. Here briefly, are the features of the Liqua-San system that find favor wherever it is used.

CUTS WASHROOM SOAP COSTS AS MUCH AS 67%

Liqua-San "C"—40% concentrated—is all soap, with no wasteful fillers. Thus, it can be diluted with 3 or 4 parts water and still give more hand-washings per gallon than any other soap.

The amazingly economical Sana-Lather Dispenser turns out soap in foam form—90% air, 9% water, and only 1% soap. Yet even this small amount speedily rolls off the dirt.

CLEANS WITH GENTLE, SOOTHING ACTION

Teachers and pupils like the Liqua-San system because it makes handwashing a simple matter

Liqua-San cleans quickly and rinses thoroughly. And because it contains a generous amount of olive oil, it leaves the skin unchapped.

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Personal News of School Officials

MRS. HOOKER PASSES

Mrs. Mary Mather Turner Hooker, a leader in local education in Hartford, Conn., for nearly a quarter of a century and the state's first woman legislator, died in the Hartford Hospital, on May 13, after a short illness of heart disease. Mrs. Hooker, who was 75, enjoyed the distinction of being the first woman legislator in Connecticut as representative from Hartford in 1921, as well as again in 1925, and maintained an intense interest in education. In 1915 she was appointed to complete the term of her husband as a member of the city board of education, and in 1918 was appointed a member of the board, which she served for twenty years, until December, 1937, when she declined re-election.

In discussing Mrs. Hooker's service to the schools, Superintendent Fred D. Wish, Jr., said:

"For nearly twenty years, as a member of the board of education, she gave unstintingly of her time and energy to promote their welfare. She further continued her interest and efforts from the time of her retirement from the board from 1937 to the time of her death.

"As first president of the board under 'consolidation,' she guided it through this difficult transition, ever and again averting potential controversies, through her fairness, courtesy, and previous experience at the head of the board.

"Her special interest in the underprivileged children was reflected over and over by her generosity. Her interest was so abiding that she has even planned to perpetuate her kindnesses through establishing a trust fund for that purpose.

"A very close second in her interests was the welfare of the school staff, 'my teachers.' Always sympathetic, she gave much conscientious attention to personal problems of individuals and many times, unknown to others, gave that help, which relieved desperate situations.

"Many people in Hartford today, have reason to be grateful for their happier school days and more effective education because of Mrs. Hooker's conscientious efforts in behalf of the Hartford schools."

MR. MILLS RE-ELECTED

Mr. H. L. Mills, business manager of the board of education at Houston, Tex., has recently been reappointed for a five-year term, beginning July 1, 1939, with an increase in salary from \$8,500 to \$10,000 a year. The five-year contract is the longest form of contract that may be given in the State of Texas.

Mr. Mills has been business manager for the Houston public schools since 1927. He began his service in Houston in September, 1911, and was at one time principal of one of the large elementary schools of the city. He is a past president of the National Association of Public-School Business Officials, and a former member of the executive committee of the Texas Teachers' Association, and is at the present time a member of the legislative committee of this association. He was awarded the honorary degree of doctor of laws by Southwestern University, Georgetown, Tex., because of his successful work in the Houston schools.

PERSONAL NEWS OF OFFICIALS

• The school board of Red Wing, Minn., has reorganized with the election of HORACE MOHN as president; HARRY BARGHUSEN as vice-president; Mrs. ALICE JOHNSON as clerk; and L. W. NORDLY as treasurer.

• Mr. FRANK R. SCOTT has been re-elected president of the school board at Fargo, N. Dak. DR. C. I. NELSON was named vice-president, and Mrs. EMMA C. FINLAND, secretary.

• Mr. GEORGE H. FRYE has been re-elected president of the board of education of Windsor, Colo. Mrs. MYRTLE TELLER was re-elected secretary.

• Mrs. MARTHA HALLER, for 31 years clerk and financial secretary of the school board at Michigan City, Ind., is retiring this year. Mrs. Haller, during her long service, has seen the school system grow from six schools, 38 teachers, and a budget of less than \$100,000 to the present twelve schools, 143 teachers, and a budget of more than one-half million dollars. She has handled many millions of dollars in school funds and it is largely through her work that the present efficient financial system has been established.

• The school board of Lamar, Colo., has reorganized with the election of PAUL STEWARD as president; HOWARD LARRICK as vice-president; J. W. MERRILL as secretary; and J. V. SAYLOR as treasurer.

• Mr. WALTER W. DAWSON has been re-elected president of the school board at Oakland, Md.

• Mrs. EDITH REISS has been re-elected as president of the school board at Alexandria, Ind.

• Mr. JAMES B. McCahey has been re-elected president of the Chicago board of education for a seventh term. Mr. McCahey has declared that he will continue his program of operating the schools for the benefit of the children, while giving due consideration to the taxpayers. Among the accomplishments listed during his term of service are the following: Reduction of the interest rate on school anticipation warrants, reduction of the board's funded debt by two million dollars, reduction of the unpaid tax warrants by eight million dollars, and provision for 56 new school buildings or additions, to cost \$9,600,000.

• The school board of Houston, Tex., has reorganized with the election of E. D. SHEPHERD as president; DR. RAY K. DAILY as vice-president; Mrs. B. F. COOP as secretary; and HOLGER JEPFENSEN as assistant secretary.

• Mr. C. D. EVANS has been elected president of the board of education at Ottumwa, Iowa.

• Mr. DANIEL M. SPOHN has been re-elected president of the board of education at Goshen, Ind.

• Mr. HERMAN W. SEAMAN has been elected president of the board of education at Loveland, Colo. R. L. ETTER was elected vice-president, and Mrs. MARIE CURTIS was renamed secretary.

• Mr. D. K. BOYD has been elected president of the board of education at Norman, Okla.

• The school board of Menz, Ark., has reorganized with the re-election of A. G. ATKINSON as president, and J. E. BISHOP as secretary.

• DR. ANDREW HARVEY has been appointed purchasing agent of the board of education at Fremont, Nebr.

• The school board at Fremont, Nebr., has reorganized with the re-election of JAMES R. HANSON as president; GLENN E. WELLS as vice-president; and R. A. JOHNSTON as secretary.

• Mr. F. WARE CLARR has been re-elected president of the board of education at Syracuse, N. Y.

• DR. GEORGE C. SHIVERS has been elected president of the board of education at Colorado Springs, Colo. Mrs. C. C. STEWART was elected vice-president.

• Mr. J. D. WILLIAMSON has been elected president of the board of education at Lenmont, Colo.

• The school board of Everett, Mass., has reorganized with the election of FREDERICK L. GALBRAITH as president, and FREDERICK A. ASHLEY as secretary.

• The school board of Holdenville, Okla., has reorganized with the re-election of FRED TREADWELL as president; JOHN WHITEHEAD as vice-president; and W. W. DOWDY as clerk.

• Mr. HARRY W. RAWSON has been elected president of the school board at Waupaca, Wis.

"I LIKE IT
BECAUSE IT CUT
HANDWASHING
COSTS 57%."

PRINCIPAL



"I LIKE THE
WAY LIQUA-SAN
CLEANS EXTRA
DIRTY HANDS."

TEACHER



"I LIKE THE
TROUBLE-FREE
LEAK-PROOF
DISPENSERS."

JANITOR



"NO HARD RUBBIN'
WITH THIS SOAP.
AND IT FEELS
GOOD TOO."


PUPIL



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DONALD PHIPPIN, Supervisor of Printing, Hartford Public Schools, preparing students for Boy Scout test in Printing at A. E. Burr High School, Hartford, Conn.

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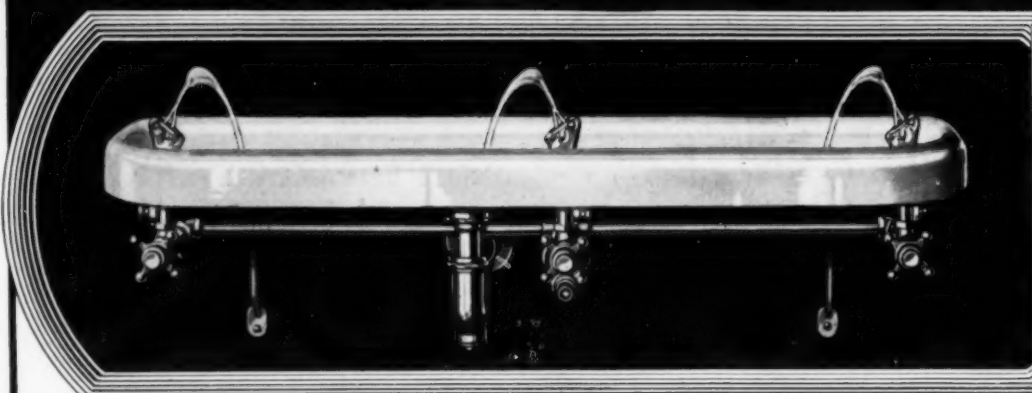
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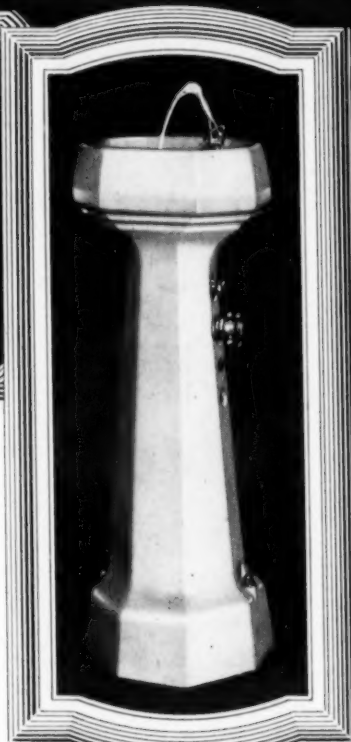
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Teachers' Salaries

SHEBOYGAN TEACHERS' SALARY SCHEDULE

The board of education of Sheboygan, Wis., has adopted a new salary schedule for teachers, which adheres to the state requirements, and which is based on length of experience, years of training, and the possession of a college (bachelor's or master's) degree. Under the schedule, a teacher enters the school system and is placed on the schedule at the discretion of the board, upon recommendation of the superintendent. Preparation, kind of experience, and length of service are the principal factors considered in this rating. The school board, upon recommendation of the superintendent will sanction special advancement of a teacher on the schedule. Individual teachers may be advanced beyond the limits of the schedule. Teachers now below the schedule may be advanced at the rate of one step annually.

Teachers and professional workers now above the schedule will be required to raise their educational qualifications in conformity with the schedule requirements by the end of a five-year period in order to maintain their present salary. Beginning with September 1, 1944, all salaries will be adjusted in conformity with the schedule, at the rate of 20 per cent of the original difference per annum.

All persons entering the school system must have completed a four-year course in a Wisconsin teachers' college or university, and must in addition, serve a two-year probationary period. A teacher who has had an unsuccessful probationary year will not be considered as eligible to a year of experience on the schedule.

Teachers with two years' training and seven years' experience will receive \$1,300, and will ad-

vance to \$1,350 in the eighth year and to \$1,400 in the ninth year. Teachers with 2½ years' training and seven years' experience will be paid \$1,400, and will advance to \$1,450 in the eighth year, and to \$1,500 in the ninth year. Teachers with three years' training and seven years' experience will receive \$1,475, and will advance to \$1,525 in the eighth year, and to \$1,575 in the ninth year. Teachers with 3½ years' training and seven years' experience will be paid \$1,550, and will advance to \$1,600 in the eighth year, and to \$1,650 in the ninth year.

Teachers with a college degree will begin at \$1,150 and will advance to \$1,650 in the seventh year. Teachers with a college degree plus one-half year will begin at \$1,250, and will advance to \$1,850 in the ninth year. Teachers with a master's degree will begin at \$1,350, and will advance to \$2,100 in the eleventh year. Married men will be eligible to receive \$300 above the schedule, and single men \$100 above the schedule. Department heads will draw \$100 above the schedule, and teachers performing special, active, or skilled service will receive \$300 above the schedule.

In order to retain the attained place on the schedule a principal, teacher, or other worker must attend a summer-school session at least once every four years. A minimum of three units of credits must be attained as established by the State University along professional lines. To receive salary advancements or to maintain the salary provided in the schedule, a teacher must receive a satisfactory recommendation from the superintendent.

Special teachers, recreational directors, supervisors, heads of departments, and principals will have their salaries adjusted individually or by special salary schedules. All such employees are required to have a minimum of four years of training.

It is provided that credits earned for the removal of a professional deficiency may not apply toward the requirements for salary advance.

Eighteen credits for three summer sessions at a college or university are accepted as one year's work. Approved nonresident credits to the number of twelve will be accepted in each eighteen as part of a half year's work, but not more than four nonresident credits may be earned in any one year for this purpose. All credits must be earned before September first of the ensuing school year in order to apply on that year's salary.

TEACHERS' SALARIES

♦ Brookline, Mass. The school board has reduced the annual increment to teachers from \$100 to \$50 for the year 1939, with a total saving of about \$4,500. Additional savings which would reach close to \$50,000 have been proposed by Dr. Thomas P. Kendrick. He proposed a reduction of \$200 in the pay of 127 teachers who do not live in town.

♦ Quincy, Mass. The school board has voted to allow the regular "step-rate" increases this year, which will benefit a hundred members of the teaching staff. The pay increases mean about \$100 a year extra to younger teachers.

♦ Colorado Springs, Colo. Increases in pay for younger teachers must be accomplished without increasing the total salary item in the budget, according to a report adopted by the board of education. The report advises the teachers' advisory committee to revise its salary recommendations with the definite aim of not increasing the total paid out in salaries.

♦ Webster, Mass. Under a revised salary schedule, adopted by the school board, twelve teachers were given salary increases totaling \$1,250. All teachers were given an extra two weeks' vacation without pay, which is the equivalent of a 5 per cent reduction.

♦ Fargo, N. Dak. The school board has approved the payment of a 7½ per cent adjusted compensation to all instructors for the last half of the school year. This is similar to the payment made for the first half of the year and

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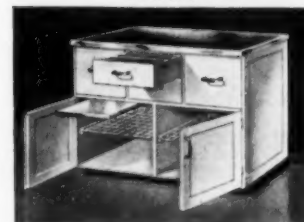
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♦ Houston, Tex. The school board has begun a study of the single-salary scale for teachers. It is estimated that the new system will add at least \$300,000 to the school pay roll.

♦ Marblehead, Mass. The school board has voted to revise the salary schedule for women teachers. The maximum for elementary teachers will be increased from \$1,440 to \$1,600, to be paid in two automatic step-ups of \$80 a year. Junior- and senior-high-school women teachers will receive a maximum of \$1,960 in place of \$1,800 a year. A bonus will be offered for increased study upon the completion of the schedule.

♦ Billerica, Mass. The school board has voted salary increases for a number of teachers in the elementary, junior and senior high schools.

♦ Wellsville, Ohio. The school board has signed contracts, calling for moderate increases in salary for teachers under the maximum limits. Basic salaries of \$900 for grade teachers, and \$1,000 for high-school teachers have been set. The maximums will be \$1,200 and \$1,600.

♦ Clinton, Iowa. Salary increases have been given to 23 teachers and supervisors in the junior and senior high schools. The increases are largely at the rate of \$5 per month, on a nine-month basis. Teachers who act in supervisory capacities will be given increases of \$100 per year, under a strict schedule. The increases total less than \$1,700 per annum and do not call for a new tax levy.

♦ Berea, Ohio. The board of education has reappointed all teachers, with increases under the salary schedule of \$2,947. The increases range from \$50 to \$70, depending upon length of service and representing one increment in the schedule.

♦ Kansas City, Mo. The board of education recently received a communication from Mr. B. M. Stigall, president of the teachers' cooperative council, in which he requests for the teachers the restoration of salaries in full, and the removal

of restrictions covering outside work. The resolution calls for restoration of salaries according to the full basic schedule of 1927-28, without discounts, and the granting of automatic and superincreases and bonuses.

♦ Danbury, Conn. The voters have asked the school board to include in its budget of \$376,632 for 1939, an appropriation covering salary increases of \$100 for all members of the teaching staff.

♦ Poughkeepsie, N. Y. The school board has voted to continue the annual increases given in accordance with the provisions in the salary schedule. No special salary raises for merit will be made this year.

♦ Albia, Iowa. The school board has given salary increases of \$5 per month to all teachers. Under the increased salary scale, \$90 per month will be the minimum.

♦ Enid, Okla. All teachers in the schools will be paid the balance of a ten per cent salary cut made last year.

♦ Galveston, Tex. The board of education has voted to give a partial restoration of salaries, beginning with the school year 1939-40. All white teachers whose salaries are below \$1,800, will be given increases of \$45 per year. Such salary increase is not to extend beyond the \$1,800 maximum. Negro teachers, whose salaries are below \$1,440, will be given increases of \$36 per year, but such increase is not to extend beyond the \$1,440 maximum.

♦ Houston, Tex. Upon the suggestion of Dr. Henry Petersen, a member of the school board, Dr. E. E. Oberholtzer, superintendent, has been delegated to make a study of the single-salary schedule, the twelve-year educational plan, and accumulated sick leaves for teachers. It is estimated that it will cost \$300,000 to install the single-salary schedule.

♦ Manchester, N. H. The board of education has revised the salary schedule for male teachers in the grades, and has increased the salaries of attendance officers. The new minimum salary for men teachers will be \$1,200, and the maximum

\$1,700. Women teachers receive a minimum of \$1,000, and a maximum of \$1,500. The attendance officers were raised from \$2,000 to \$2,200.

♦ Oklahoma City, Okla. Pay-roll reductions, estimated to save \$75,000 in the 1939-40 school budget, have been approved by the board of education. The salaries of 60 teachers were saved by eliminating 35 substitutes, by not filling vacancies created by resignations, and by nine outright dismissals.

♦ Milwaukee, Wis. The board of school directors has approved a recommendation of Supt. M. C. Potter, calling for increases of \$100 a year for 64 high-school teachers.

♦ Englewood, N. J. The school board has approved a new salary schedule, which is intended to adjust salaries and remove injustices which formerly existed. The increases will benefit teachers in the lower salary brackets and will increase the annual payroll by \$6,000.

♦ Addison, N. Y. The school board has approved a new salary schedule for teachers. Beginning with the new school year, teachers will be paid monthly, instead of for a ten-month period.

♦ Lowellville, Ohio. The board of education has increased the salaries of teachers for the school year 1939-40. Under the new scale, teachers receiving salaries of \$2,000 or more will be given increases of \$50; teachers receiving from \$1,500 to \$2,000 will be given increases of \$75; and teachers receiving less than \$1,500 will be given increases of \$100.

♦ Marion, Ohio. Teachers' salaries have been increased 8 per cent this year, bringing the total to the 1930-31 level. Under the new scale, elementary teachers, with two years' training, will be paid a minimum of \$100 and a maximum of \$155 per month. Junior- and senior-high-school teachers will receive a minimum of \$130 and a maximum of \$225 per month. Elementary teachers, with four years' training will be given an additional \$10 per month. Teachers with a master's degree will also receive an additional \$10 per month.



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CHICAGO

Teachers and Administration

Dual Jobs Forbidden

Governor Lehman, of New York, has signed the Goldberg dual-job-ban law, which had been opposed by all teachers' organizations except one. Under the law, which goes into effect immediately, no teacher may hold a second position—as in the evening schools or vacation playgrounds—unless the board of superintendents certifies that his services cannot be spared. In such case, exemption not to exceed one year will be granted.

It is estimated there are 1,209 persons holding dual jobs in the schools of New York City. There are 367 teachers whose salaries are not less than \$4,000, who have another position paying them \$1,000 or more extra. There are 72 teachers, with salaries over \$5,000, who hold dual jobs, paying \$1,200 a year or more.

Teacher Tenure Still an Issue

A new study of teacher tenure, conducted by the research division of the National Education Association, indicates that there are three issues which complicate the problems of legislation on this subject.

From the survey it appears that the three most critical problems are: (1) the probationary period, (2) the status of the married woman teacher, and (3) the continued professional improvement of teachers who attain tenure.

The probation period problem is complicated by the lack of satisfactory methods for appraising teaching efficiency and by the unethical practices of some school boards. The question of whether or not married women should be employed is not exclusively a school problem. The element of public opinion on that issue is a deciding factor.

The largest extent of approval of tenure both among board members and superintendents comes from the states where state-wide tenure laws have been passed. In these states 48 per cent of the board members and 94 per cent of the superintendents express approval of tenure.

TEACHERS AND ADMINISTRATION

♦ Cleveland, Ohio. Jobs of 37 married school teachers, classified as cadets, have been saved by the board of education's education committee decision to abolish the two-year limitation on cadet appointments. With the amending of the code, cadet teachers can remain in their classrooms indefinitely provided they have the proper recommendations. A cadet teacher who marries automatically loses her job for at least six months.

♦ Los Angeles, Calif. The school board, overriding an impassioned plea by Joseph Scott for veteran teachers, has voted to retire 411 members of the teaching staff. Under the action, 373 teachers who have reached the age limit of 65 or over, or who have been pronounced physically disabled, will automatically be placed on the retirement list July 1. The remaining 38 teachers will be retired next October. The group will be retired on salaries ranging up to a maximum of \$100 per month.

♦ Newton, Mass. The school board, faced with a reduction of \$18,000 in salary items in its budget, has voted to absorb \$17,000 of the amount through transfers and leaving fifteen vacancies unfilled.

♦ Frankfort, Ky. The school board has approved a policy whereby women teachers already employed in the schools will not be denied reappointment because they marry. Women teachers not now in the system and who are married, will not be employed.

♦ Galena, Ill. The school board has passed a rule, prohibiting the employment of married women as teachers.

♦ Waltham, Mass. The school board has made a reduction of \$1 a day in the salaries of substitute teachers. The rate was cut from \$5 to \$4 a day. In the high schools, the salary rate was cut from \$6 to \$5 a day.

♦ Milford, Mass. The school board has voted to discontinue all differentials to teachers on sick leave. The action of the board entitles the teachers to receive salary only during the sick-leave period of five days. Under the former plan, teachers were paid their salaries during a five-day sick leave, at the expiration of which they received the difference between their salaries and that paid to a substitute.

♦ Galveston, Tex. The school board has adopted a new policy with respect to the election of teachers over 70 years of age. Under the resolution, during the school year 1940-41, and for all subsequent years, no person who becomes 70 years of age on or before September of the year of any election of teachers, will be eligible for election or re-election as superintendent, teacher, or permanent substitute. All contracts for such veteran employees, who shall have reached the age of 70 before September 1, 1939, shall include an option to terminate employment by giving thirty days' notice when funds for retirement benefits are appropriated by the state legislature.

♦ St. Louis, Mo. The grade teachers' association has notified the school board of its adoption of a resolution favoring voluntary retirement of teachers at the age of 65, and compulsory retirement at 70 years. A uniform retirement pay of \$1,200 a year was advocated.

♦ Greenfield, Mass. Under a new salary schedule adopted by the school board, training and professional study will be the deciding factors in the payment of maximum salaries. Junior- and senior-high-school teachers, in the future, must obtain master's degrees to earn the maximum salaries. Teachers who have reached the maximum salaries, must continue to study to maintain that salary.

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School Finance and Taxation

♦ New York, N. Y. To keep within the financial limits imposed by the mayor's and the state legislature's combined budget cuts, the board of education has proposed that, beginning with September 1st, it will (1) dismiss 1,000 regularly employed day teachers and supervisors; (2) close down kindergartens and send home children less than 5 years 3 months old; (3) shut down all evening schools, community centers, athletic centers, and dismiss the entire teaching personnel of these activities; (4) increase class sizes in all schools; and (5) cut down on textbooks and supplies issued to children in day schools, and reduce repairs and upkeep to absorb \$8,289,000 in economies.

The drastic cuts, the board made plain, will be put into effect unless it gets financial relief. The state legislature, which cut \$5,300,000 in state aid from the governor's budget, was held chiefly responsible by the board for its predicament. About one thousand teachers are in danger of losing their positions under the new economy program imposed by the board.

♦ Iron River, Mich. The school board has adopted a budget of \$150,580 for the school year 1939-40. This is a decrease of \$1,500 from the estimate of 1938.

♦ Nashville, Tenn. The board of education has approved a budget of \$1,423,000 for the school year 1939-40. This is an increase of \$120,000 over the past year and is intended to cover higher costs anticipated for such major items as teachers' salaries, vocational guidance, and textbooks.

♦ Albion, Mich. The school board has adopted a budget of \$170,391 for the year 1939-40, which is based on an increase of 10 per cent in the property tax to be collected next winter.

♦ Kalamazoo, Mich. The board of education has adopted a budget of \$1,433,758 for the oper-

ation of the schools in 1939-40. In local taxes the budget provides \$640,000 to be raised for operating expenses, and \$218,000 for debt service.

♦ Macon, Ga. The schools of Bibb County will be operated next year on a budget of \$569,000, which is \$8,000 less than the appropriation for the year 1938.

♦ Boston, Mass. The school board has voted to cut more than \$50,000 from its next year's financial program. The board anticipates possible total savings of \$391,328 on the budget for the current year. The total budget will reach \$821,006, or \$72,725 less than that of last year.

♦ Newton, Mass. The school board has approved a report, by the superintendent of schools, showing possible savings of \$38,930 for the school year 1939-40. The savings will be made by leaving unfilled fifteen vacancies, by reducing the pay of substitutes, and by having the principals assume the direction of more than one school. The raising of the age of entrance to the kindergarten eliminates the need of two sessions and the higher salaries paid to those who teach two sessions.

♦ Westfield, Mass. The school board has voted to close the Waban School as an economy measure. Supt. C. D. Stiles has proposed that the high-school tuition rate for nonresident pupils be increased from \$94 to \$100.

♦ Mankato, Minn. The board of education has prepared a budget, calling for \$282,820 for the year 1939-40. This is an increase of \$23,000 over the estimate for 1938. The largest item is \$165,945 for instructional expenses.

♦ Kearney, Nebr. The budget for the city schools for 1939-40 has been set at \$149,887. The amount for 1938 was \$147,408. The levy is to be 18.35 mills, which will raise \$2,400 more this year to compensate for loss of revenue from state appropriations.

♦ Lawton, Okla. The voters have approved a ten-mill tax levy for the maintenance of the schools. The new levy is in addition to five mills required by law and gives the schools about \$67,500 additional funds.

♦ The school board of Port Huron, Mich., is faced with the prospect of a nine-month school term in 1939-40, due to a serious financial situation. The board anticipates that it will receive \$60,000 less in state funds for the next year.

♦ St. Paul, Minn. Mr. Axel F. Peterson, Commissioner of Education, in urging the pay-as-you-go plan for the financing of school-building programs, has declared that the city is paying more than twice as much annually in interest on construction indebtedness as it is for new construction. He pointed out that the city owes \$9,200,000 on its school structures and equipment and that the interest on this debt is \$390,000 a year. The annual building budget during the past two years has been \$150,000.

In defending the pay-as-you-go plan for present and future building, Mr. Peterson said that the interest on three appropriations for school building, which would amount to \$14,000 annually for approximately 25 years, is being saved to the taxpayers.

♦ Houston, Tex. The school board has announced that about \$2,500,000 has been added to the school district's tax rolls outside the city limits, including pieces of property which had escaped assessment altogether. The school board, in February last, employed Mr. Henry Burke as a tax expert to check on the values of properties in the district outside of Houston. So far the expert has been able to find nearly 1,000 properties, mostly residential, which were not on the tax rolls or not on the rolls at their proper value.

♦ The Louisiana State Board of Liquidation has voted to borrow \$1,000,000 for the public-school fund of the state. The money will permit the distribution of \$16 per educable as the state's contribution to support the public schools. The public school fund of the state was a million dollars short because the severance tax revenue did not yield as much as was anticipated in making up the budget at the 1938 legislative session.



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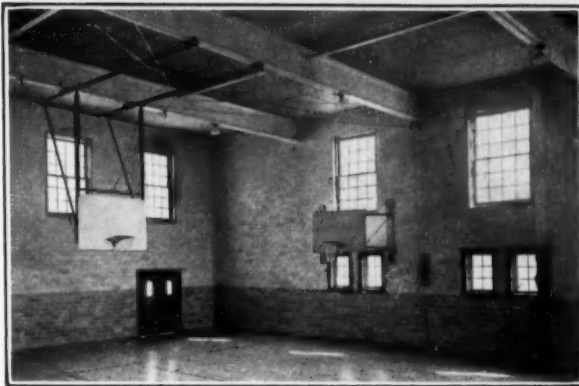
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FINANCE AND TAXATION

♦ Dearborn, Mich. The valuation of the Fordson School District for the year 1939-40, as compiled by the school board, is \$158,112,795, as compared with \$148,908,992 for 1938. The tax levy for 1938-39 was \$9.82 per each \$1,000 of valuation, and for 1939-40 it was \$9.094, which is divided into operating expense of \$6.071 per \$1,000, and debt service of \$3.023 per each \$1,000.

♦ St. Louis, Mo. Public-school expenditures have been ordered reduced by \$600,000 for the fiscal year, beginning July 1, in an effort by the finance committee of the board to meet the financial crisis and to balance the current budget. School department executives have been ordered to bring in recommendations for proposed reductions at the next meeting of the board.

♦ Tulsa, Oklahoma. The board of education has adopted a budget of \$2,634,450 for the year 1939-40. Despite a threatened loss in state aid, cut from \$12,800,000 to \$11,500,000, the board has increased the budget some \$200,000 above the 1938 appropriation. The largest item is \$1,615,000 for salaries of teachers.

♦ Springfield, Ill. The nonhigh-school district has paid in full its tuition debt to the Springfield district, amounting to \$61,300. The nonhigh payment to the city school board represents slightly more than one third of the total debt of about \$150,000 of a group of school districts. All were paid. The entire amount will be paid through a special bond issue covering twenty years.

♦ Appleton, Wis. The school budget for 1939 has been set at \$358,000, which is an increase of \$58,000 over the year 1938. During the past five years the budget was raised a total of \$80,000, or an average of \$16,000 per year.

♦ Oklahoma City, Okla. The new city school board has approved a radical economy program for the city schools during 1939. The program embraces an estimated \$115,000 reduction in pay rolls. It is estimated that more than 150 employees will be dropped in 1939 and in 1940. The

budget is \$333,000 less than that asked by the old board a year ago, and is still subject to the reduction of \$115,000 in pay roll before salary cuts are made.

♦ Stamford, Conn. The board of education has approved a budget totaling \$1,137,500 for the year 1939. The budget includes an item of \$4,200 for new teachers. A new item of \$5,000 for the school library is reduced to \$2,000.

♦ Battle Creek, Mich. The board of education has adopted an operating budget of \$797,296 for the year 1939. This is a decrease of \$113,704 from the estimate of 1938.

♦ Evanston, Ill. The Evanston Township high-school district board has prepared its 1939 budget, calling for reductions in teaching personnel and curtailment in curricular offerings. The financial situation has been depressed by the unexpected lowering of property valuations and the existence of a large tax delinquency which has depleted the available income for school purposes. A recent study showed that from 1929 to 1936, the total delinquency for the high-school district is \$1,233,497.

♦ Iron River, Mich. The school board has adopted a budget, calling for \$150,579 for the year 1939. This is a decrease of \$1,500 from the estimate of 1938.

♦ Darien, Conn. The board of education has received approval of a budget of \$187,942, which is a cut of \$12,000 from the original request. Included is an item of \$5,400 for four new teachers.

♦ Rock Springs, Wyo. The school board has adopted a budget of \$178,095 for the operation of the schools in 1939-40. This is a decrease of more than \$1,000 below the estimate for 1938.

♦ Elmhurst, Ill. The school board has ordered that supervisory and administrative expenses be cut by \$3,000 for 1939-40 school term. The action is intended to compensate for the operation of the Old Field School next year.

♦ Beloit, Wis. The school board has adopted a budget of \$435,958 for the school year 1939-40.

Of the total amount, \$340,389 will be raised by taxation.

♦ Springfield, Mass. The board of education has adopted a regulation requiring the bonding of school employees who handle funds of the board. Between 25 and 50 employees are affected by the rule.

♦ Stratford, Conn. The school board has voted to restore to the school budget a \$4,300 appropriation for maintaining ten kindergarten classes, which had been cut from the original budget of \$372,508 to offset a \$15,000 economy reduction by the town council. The action followed pressure brought to bear upon the board by the parent-teacher council and the town council.

♦ Worcester, Mass. The board of education has begun a program of retrenchment to effect a reduction of \$50,000 in the annual school budget. The saving will be effected in part by the closing of kindergartens and first grades in schools having a small attendance, and by the elimination of certain substitute teachers.

♦ Casper, Wyo. The school budget for District No. 2 amounts to \$325,000 for the school year 1939-40, a reduction of \$14,487 from 1938.

♦ Webster, Mass. The school board, faced with a pay roll of \$3,000 and the necessity for radical economies, has revised the school calendar and ordered a two weeks' payless vacation for teachers. A saving of \$6,000 is anticipated as a result of these economies.

♦ Port Huron, Mich. The school board has adopted a budget of \$609,692 for the year 1939-40. The new budget is based on a nine months' school year and represents a reduction of \$53,000 from the estimate of last year.

♦ Pontiac, Mich. The school board anticipates that there will be a shortage of approximately \$389,000 in the revenue available next year. The board has prepared a budget for 1939-40, calling for a ten months' school term, and will need \$1,220,000 to complete the operation of the schools for that period.

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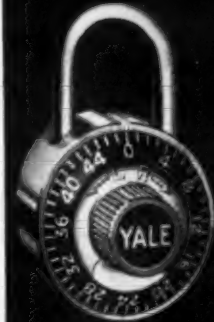
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New Books

State Aid and School Costs

A Report of the Regents' Inquiry. By A. G. Grace and G. A. Moe. Cloth, 391 pages. Price, \$3.50. McGraw-Hill Book Company, New York, N. Y.

Within the present decade the question of the relative apportionment between local support and state aid for the schools has here and there come to the surface with exceptional emphasis. The equalization plan to bring the poorer district nearer the levels of the richer district has not in every instance met the needs of the situation. Further refinements have been found necessary.

Now the State of New York comes forward with a study of the subject as applied to its own confines and brings out pertinent facts which may lead to desired changes in the school complex. It proceeds to find out "what the educational system of the state is accomplishing" and "how well its total program fits present-day needs." The study is divided into two parts, the first concerning itself with "The Problem and Its Issues," and the second with "School Costs."

In discussing the problem and the issues, the report sets forth that New York "provides more liberally for its public school system than any other state in the Union." Nevertheless, the depression has brought embarrassments to New York State, as well as it has elsewhere, and has accentuated its problems.

Thus, the question is asked whether it is possible to equalize educational opportunity in more than 8,000 school districts in the state; shall public education be controlled by the state or the locality; shall the educational program leave problems of welfare, defectives, delinquency, or related problems to other social agencies? These and other questions are asked.

They are followed by recommendations which

aim at simplification in school control, the elimination of the smaller units, and the establishment of "municipal school districts" and "central school districts." Also optional county units are suggested. Each plan contemplates a board of education, a school superintendent, and where deemed advisable a business manager.

The concept of control advanced is to the effect that the state educational department "should provide the leadership, the service, and the research essential to a well-organized and effectively managed school system."

Throughout the report sharp criticism of the present school laws is expressed, maintaining that a school system composed of 8,412 independent and autonomous school districts cannot be successfully administered. The complaint is made that boards of education generally have become administrative rather than policymaking bodies, and that equalization is conceived of entirely in terms of financial assistance. Nonresident tuition fees for high-school pupils has led to the perpetuation of the small high school and to unethical and costly competition for attendance.

Among the recommendations for improving conditions are: Reduce the number of school districts of consolidation; namely, where the attendance is less than twenty pupils, in union free school districts where the attendance is fewer than one hundred pupils, appoint a state commission that shall undertake the consolidation of school districts into units sufficiently large units to insure a school system equal to the best.

The tendency of the compilers of the report is decidedly in the direction of the centralization of authority in professional hands as instanced by the following paragraph: "Legislation should be enacted clearly establishing the superintendent of schools as the responsible head of the school system and giving him the power to appoint all personnel without the confirmation of the board of education."

Another innovation proposed is found in the recommendation that general staff activities, such

as budgeting, accounting, preauditing, personnel administration, and plant maintenance, should be distinguished as management aids and centralized in divisions or officers under the immediate direction of the superintendent.

"Except when making investigations it is imperative that the board deal with the administrative staff, teachers, and other employees of the system through the superintendent. Freeing the board from administrative routine will allow the board members to concentrate on the broader and more important responsibility of evolving policies and standards, for the enforcement of which they will hold the superintendent responsible. An effective system of administrative reports will aid in keeping the board informed as to whether standards are being met or whether a change in policy, or in the superintendent, is desirable."

City Planning: Why and How

By Harold MacLean Lewis. Cloth, 248 pages. Price, \$2.50. Longmans, Green & Company, New York, N. Y.

Here is a simple, practical, and illuminating volume on the why and how of city planning. The author, an engineer, with ample experience behind him, tells of the planning that might be done today "in order that the citizens of tomorrow might lead more comfortable, healthier, and happier lives."

Thus, he concerns himself with the natural growth of the city; namely, its streets, parks, transportation routes, schools, sewers, water mains, wharfs, buildings, airports, and all other features that relate to urban life. He argues that while the art of planning has been practiced for many years, it is more than ever important because of the new problems of social life, population density, and transportation and because of the new techniques which are available through the advance of technical knowledge, sociological and economic advances, etc.

The section of the book outlining the steps which must be taken by the general public, the

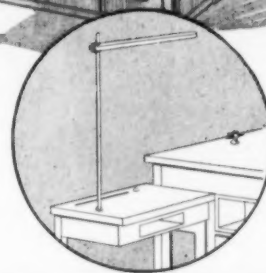
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city and county officials, and the technical planning staff is particularly practical and specific. The treatment is perhaps too brief, but it is ample for an understanding of the machinery and the methods which are most effective.

This book has its value in its compactness and its directness. At the same time, it embodies the latest and most approved ideas on the subject.

Current Issues in Library Administration
Papers Presented Before the Library Institute at the University of Chicago, August 1-12, 1938. With an introduction, by Charleton B. Joeckel. Price, \$1.55. University of Chicago Press.

Because many administrators of public libraries, large and small, directors of library schools, and librarians, watching the development of the library idea, have been troubled to see that the library, like Topsy, "has just grown" without a definite philosophy, without a set of universally accepted objectives, they have come to believe that without such helps the library cannot be managed intelligently nor effectively. They see that since the library is generally supported by public funds, its management is really one of the problems of government, and that whatever administrators from government, industrial, and educational fields have learned by the application of the scientific method rather than by the trial-and-error plan should be applied to this big community enterprise.

Hence, in the summer of 1938 at the call of the Graduate Library School of the University of Chicago librarians met to listen to discussions on administration from the public servant point of view, by such men as Carl H. Chatters, Executive Director of Municipal Finance Officers Association of U. S. and Canada; G. Lyle Belsley, Director of Civil Service Assembly of U. S. and Canada; James L. McCamy of the Social Studies Faculty of Bennington College, Bennington, Vt. Well-known librarians gave papers on the role of the board of trustees, on branch libraries, departmental organization, practical publicity, library finance, personnel, and interpretation of the library.

These papers, collected and edited by Charleton B. Joeckel of the Graduate Library School of the University of Chicago, make up the book *Current Issues in Library Administration*. Although the issues are discussed from the point of view of the large- or medium-sized library, there is an underlying basis of sound structure that offers much to every librarian; for no matter how small a library is, nor how limited its field of service, the person in charge needs occasionally to be brought face to face with the need of stating to herself, if not to her board and the public, the purpose of the library, its value to the community, its needs and obligations. There are times when she needs to be charged with well-thought-out ideals of service. These papers will do just that.

The book should be useful to library administrators who desire to chart their courses with more dependable instruments. It could be used with benefit at library group conferences, at board or trustee meetings, and it deserves the serious attention of librarians who know that if they are to serve well in their own small sphere, they must be aware of the way larger institutions are being administered and interpreted. — *Lilian Gaskell.*

NEW BOOKS

Tenure of School Administrators

Prepared under the direction of Daniel DuShane, chairman of committee. Paper, 28 pages. Price, 25 cents. Published by the Committee on Tenure of the National Education Association, Washington, D. C.

No member of the school staff needs security of position more than the administrators. It is they who bear the brunt of criticism from the school board and the public, as well as the occasional antagonism of classroom teachers.

The present report is an attempt to assemble data concerning the tenure of school administrators. The study is reported in four parts, dealing with county superintendents, city superintendents, principals, while Part IV is given to the summary and conclusions. The findings indicate that the tenure of school administrators is affected by tenure laws and by size of district. The rural administrators in states having no protective legislation have both influences against them. There is a marked tendency toward placing superintendents and other ad-

ministrators under the protection of state tenure laws.

A Child's Book of Famous Composers

By Gladys Burch and John Wolcott. Cloth, viii-184 pages. Price, \$1.50. A. S. Barnes & Company, New York, N. Y.

A life story in music of twenty of the most famous composers is here told in language suited to children from ten to fifteen years of age. The author has done well in limiting his story to essential facts which contribute to the true appreciation of music.

State Aid to Private and Sectarian Schools

Paper, 43 pages. Price, 15 cents. Compiled and published by the Research Division of the National Education Association, Washington, D. C.

Upon what legislative conditions, and to what extent, is state aid extended to private and sectarian schools? The present report offers the results of a study of state legislation, court decisions, and practices in the area of state assistance to private and sectarian schools and to the pupils of these schools. The data are presented in four parts: (1) constitutional provisions, judicial decisions, and statutes relating to state aid; (2) provisions regarding exemptions from taxation of private and sectarian school property; (3) types of state assistance given to private and sectarian schools; (4) past and present efforts to obtain public funds or other assistance for private and sectarian schools.

Salaries Paid Teachers, Principals, and Other School Employees, in 212 Cities in 1938-39

Paper, 38-6 pages. Tabulations II-A, May, 1939. Published by the Research Division of the National Education Association, Washington, D. C.

In this report seven groups of school employees are studied, in one population group, namely, cities with a population of 30,000 to 100,000. A total of 212 cities is included in the survey, which comprises attendance officers, clerks in school offices, deans in high schools, department heads, principals and vice-principals, and teachers in special classes, elementary schools, high schools, kindergartens, and part-time schools.

The report shows (a) the arithmetic mean salary paid from 1931 to 1939, (b) the median salary paid in 1937 and 1939, (c) the number of employees, and (d) the distribution of salaries paid in 1939.

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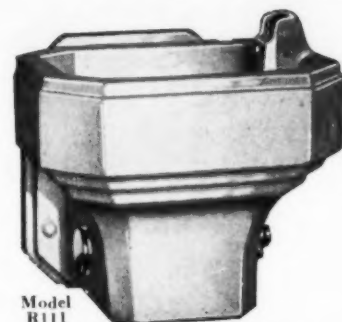
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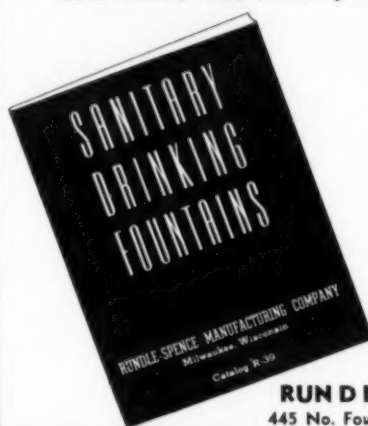
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Cooperatives in the United States

By Maxwell S. Stewart. Paper, 32 pages. Bulletin No. 32, 1939, of the Public Affairs Committee, New York, N. Y.

Increased business for the cooperatives is seen despite the fact that American cooperatives face a series of special handicaps as compared with the European cooperatives. Among those listed are the competition afforded by the American chain store, with its economies of bulk buying, and the difficulty of coping with magazine and radio advertising for trade-marked brands not carried by the cooperatives. Given efficient management, it is expected the cooperative movement will undergo a rapid growth in the country.

Meeting Our Neighbors

By Jennie Wahlert and Julia Letheld Hahn. Cloth, 311 pages. Price, 88 cents. Houghton Mifflin Company, Boston, Mass.

This third reader further develops the idea that school reading must make all printed symbols in papers and books carry a meaning which is sought and understood. The subject matter includes units on reading, on newspaper making, on corn farming, on child life in China. Very recent writers of importance are included.

Home is Fun

By Miriam E. Mason. Cloth, 157 pages. Price, 80 cents. Beckley-Cardy Company, Chicago, Ill.

This book meets the objectives of the home unit in social science. It teaches the fundamental facts about the home and the contribution of each member of the family to the life of the home. It also supplies helpful information to children about food, transportation, types of homes, and furniture for the various rooms.

Track and Field

By Ray M. Conger. Cloth, 92 pages. Price, \$1. A. S. Barnes & Company, New York, N. Y.

This handy book discusses the fundamental techniques of running, jumping, hurdles, discus, shot put, and javelin.

Physical Education in the Elementary Grades

By Strong Hinman. Cloth, 507 pages. Price, \$2. Prentice-Hall, Inc., New York, N. Y.

This book has been prepared for the purpose of providing in physical education an abundance of practical material that can be used by elementary teachers in rural and city schools to carry on their daily duties in this field.

In compiling the material, an effort was made to offer in one book sufficient subject matter for a year's program for each grade in the elementary school. Every activity

in the book has been tested and used successfully by classroom teachers for a modern program of physical education.

The subject matter is devoted to health service and physical education, club leaders, planning of the essentials for a year's program, story plays, rhythmical activities, games and relays, athletic games of low organization, conditioning exercises, and stunts and self-testing activities.

School Buildings and Equipment

Prepared by a committee, under the direction of Homer W. Anderson, Chairman. Paper, 30 pages. Bulletin No. 8, April, 1939, of the American Council on Education, Washington, D. C.

Next to the teaching personnel, the character of the school-building facilities is a very important factor which influences and conditions to a large degree the schools' programs and activities.

The present bulletin is a report on an exploratory study of the present status and need for research in school buildings and equipment. The first section discusses the influence of various factors upon school-plant planning, and the second portion deals with some of the major research problems in the area under consideration. It is the purpose through the research program suggested by the committee, to effect modifications in the construction of school buildings which will effect savings in the annual current expenditures for education.

Story Pictures of Transportation and Communication

By John Y. Beaty. Cloth, 223 pages. For grades three and four. Price, 88 cents. Beckley-Cardy Company, Chicago, Ill.

This is the story of present-day communication by means of land, water, and air transportation; writing, speaking, and other forms of transmitting messages. For small children, the chapter on the origin of human language is a bit of unwelcome conjecture.

Minimum Standards for School Buses

Prepared by Frank W. Cyr, M. C. S. Noble, Jr., and Frederick H. Dutcher. Paper, 42 pages. Published by the International Textbook Company, Scranton, Pa.

A large majority of the states by the authority of state law had developed standards for school-bus construction and operation which they thought were conducive to safety and economy. Variations in construction standards have not resulted in economy because they hamper production of buses for a national market and compel the construction of buses as custom-made jobs without adding to safety. It became necessary, therefore, to set up uniform standards through co-operative action of the 48 state departments, under the direction of the pres-

ident of the National Council of Chief State School Officers, and the State Superintendent of Public Instruction of Arizona. The present standards, it is hoped, will result in greater safety and economy in school-bus construction throughout the country. They relate chiefly to bus chassis, bus bodies, uniform color for all buses, and selecting and training of bus drivers.

Statistics of Special Schools and Classes for Exceptional Children

Prepared by Emery M. Foster and Elise H. Martens. Paper, 179 pages. Price, 20 cents. U. S. Office of Education, Washington, D. C.

This study contains the statistics collected in connection with the Biennial Survey of Education in the United States for the period 1934 to 1936. It makes clear the present condition and tendencies in special educational facilities and courses for eight general types of exceptional children. The administration of residential schools and the special supervision of city school systems are treated.

A Study of the Status of the Rural High-School Principal in Kansas

By Lyle Warren Hilbert. Paper, 27 pages. Bulletin No. 10, October, 1938, of the Kansas Teachers' College, Emporia, Kans.

The main objective of this study has been to determine the status of the rural high-school principal in Kansas and to ascertain his professional position in relation to other administrators with comparable positions. The data were collected from the High-School Principal's Reports to the state education department and from other sources.

The study concludes that the principal of the average rural high school is in reality a teacher with added administrative responsibilities, since he teaches four classes a day and supervises one study hall. The average high-school principal has supervision over four teachers. More principals teach social science than any other subject.

Comparison of Costs Per Pupil in Average Daily Attendance in Ohio City and Exempted Village School Districts from July, 1937 to June, 1938

Compiled by T. C. Holy and H. H. Church. Paper, 22 pages. Published by the Bureau of Educational Research, Ohio State University, Columbus.

This report presents an analysis of the current expenses and totaling operating costs per pupil in average daily attendance in 108 cities and 67 exempted villages in the State of Ohio for the school year 1937-38. Part I is a comparison of per-pupil A.D.A. costs for current school expenses in cities and villages during the year 1937-38. Part II is a comparison of per-pupil A.D.A. costs for total payments in Ohio cities and villages for the same year.

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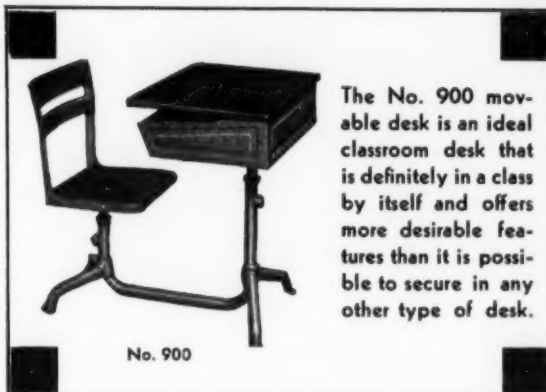
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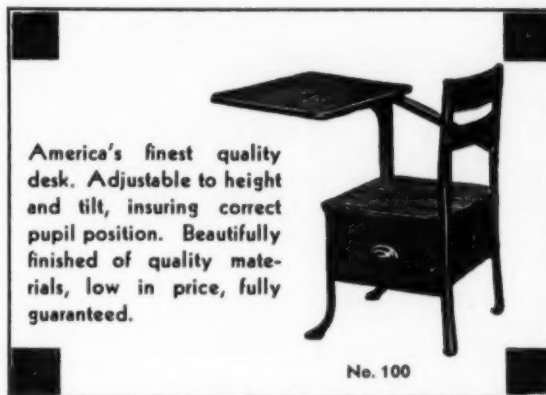
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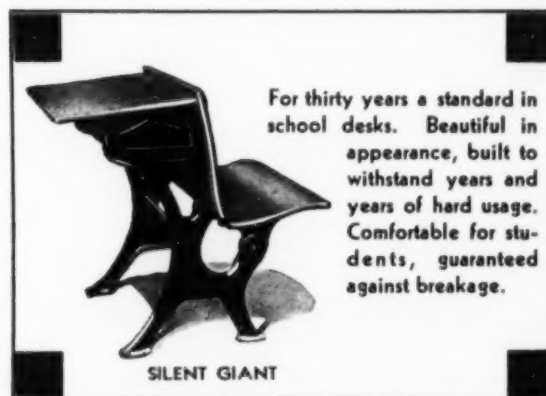
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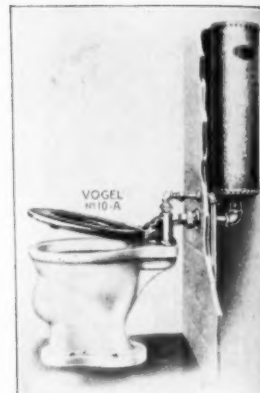
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FOR EVERY SCHOOL INSTALLATION



VOGEL NUMBER TEN—The durable, economical, seat-action closet. For installation in schools, institutions, comfort stations, public and semi-public places.



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News of Superintendents

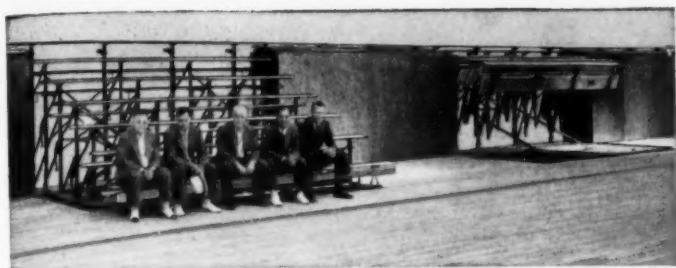
- MR. O. J. KORB, of South Euclid, Ohio, has been elected superintendent of schools at East Cleveland.
- SUPT. H. H. EELKEMA, of Duluth, Minn., has been re-elected for a three-year term.
- SUPT. T. B. POOLE, of Deckerville, Mich., has been re-elected for another year.
- MR. J. CORNELL JOHNSON, of Forest City, Iowa, has been elected superintendent of schools at Radcliffe.
- SUPT. M. E. HALLING, of Atkinson, Ill., has been re-elected for his fifth year.
- MR. EDWIN DIGBY has been elected superintendent of schools at Genoa, Ohio.
- SUPT. RALPH H. WATERHOUSE, of Akron, Ohio, has been re-elected for a new five-year term.
- MR. H. W. STINSON, of Toluca, Ill., has been elected superintendent of schools at Plymouth.
- MR. JAMES LEWIS has been elected superintendent of schools at Dowagiac, Mich. He succeeds Carl M. Horn.
- SUPT. R. L. TOMLINSON, of Bonaparte, Iowa, has been re-elected on a twelve-month contract, which includes training and directing the band during the summer.
- MR. BURTON P. FOWLER, headmaster of the Tower Hill School, Wilmington, Del., received the honorary degree of doctor of pedagogy at the sixty-eighth commencement at Syracuse University, on June 5. Mr. Fowler is an alumnus of the School of Education of Syracuse University. He is also a member of the problems and plans committee of the American Council on Education, and adviser to the Julius Rosenwald Fund.
- MR. L. E. EARY, of Baraga, Mich., has been elected superintendent of schools at Amasa. He succeeds Charles Merke.
- MR. C. L. McMAHAN, of St. Marys, W. Va., has been elected superintendent of schools at Newcomerstown, Ohio. He succeeds the late W. B. Hayes.
- MR. HARRY LORANCE has been elected superintendent of schools at Bushnell, Ill.
- MR. O. E. DUNKEL, of Manchester, Mich., has been elected superintendent of schools at Farmington.
- SUPT. JOSEPH ZACK, of Mineral City, Ohio, has been re-elected for another year.
- SUPT. J. F. SWEARINGEN, of Salineville, Ohio, has been re-elected for the next year.
- MR. LEO PHEARMAN, of Dedham, Iowa, has been

elected superintendent of schools at Gaza, to succeed H. J. Maxwell.

- SUPT. G. T. STUBBS, of Durant, Okla., has been re-elected for another year. Mr. Stubbs is beginning his eleventh year as head of the schools.
- SUPT. H. H. EIBLING, of Maumee, Ohio, has been re-elected for a term of three years, with a substantial increase in salary.
- MR. W. S. GUSSNER, formerly principal of the high school at Jamestown, N. Dak., has been elected superintendent of schools, to succeed C. L. Robertson.
- MR. E. PERLEY, of Groveland, Mass., has been elected superintendent of the Sherborn-Hollister-Medway school union at Medway.
- SUPT. GEORGE CARTER, of Clio, Mich., has been re-elected for his eighth year.
- MR. EARL PHILLIPS, of Sabula, Iowa, has been elected superintendent of schools at Olin.
- MR. WALTER CLAUSON, superintendent of schools at Farmersburg, Iowa, died in an Elkader hospital, on May 24.
- MR. CHARLES SMALLWOOD has been elected superintendent of schools at Charlotte, Mich.
- SUPT. E. E. IRWIN, of Lapeer, Mich., has been re-elected for his twenty-fifth year.
- DR. CLARENCE E. ACKLEY, Deputy Superintendent of Public Instruction of Pennsylvania, has been appointed acting superintendent of the department. Dr. Ackley is taking the place of Dr. Lester K. Ade, who has headed the department for four years, and whose term of office expired on May 31.
- MR. WILL C. WOOD, former State Superintendent of Public Instruction of California, died at his home in Piedmont, on May 15, after a four years' illness. Mr. Wood occupied a position in California educational circles which placed him in the forefront of the great leaders who gave the schools of the state many of their progressive features.
- After graduating from high school, Mr. Wood became a country school teacher. In 1901 he enrolled in the education department of Stanford University.
- After a year at Stanford, he returned to Solano County, becoming principal of the Fairfield Elementary School and president of the County Board of Education. Four years later he was made principal of the Wilson School, in Alameda.
- In 1909 he was elected city superintendent of schools in Alameda, where he demonstrated a leadership which resulted in his selection as State Commissioner of Secondary Schools in 1914. Five years later he succeeded Edward Hyatt as State Superintendent of Public Instruc-

tion, a position in which he served until 1927. He resigned to become Superintendent of Banks of California.

- DR. CHARLES A. HOWARD, of LaGrande, Oreg., has been appointed president of the Oregon Normal School at Monmouth. Dr. Howard was State Superintendent of Public Instruction for thirteen years, and president of the Southern Normal School for eight years, prior to assuming his last position as president of the Eastern Oregon Normal School.
- MR. J. WARREN AYER, of Monrovia, Calif., has been elected superintendent of schools at Eureka. He succeeds George B. Albee.
- MR. E. D. MARTIN, superintendent of schools at Deming, N. Mex., will retire on July 15, having reached the retirement age of 60.
- SUPT. W. E. ROSENSTENGEL, of Columbia, Mo., has entered upon his eighth term as head of the city schools.
- SUPT. B. F. STANTON, of Alliance, Ohio, has been re-elected for another year.
- SUPT. ARTHUR DEAMER, of Cedar Rapids, Iowa, has been re-elected for a three-year term.
- MR. JOHN J. CORY, formerly principal of the South High School in Denver, Colo., has been elected assistant superintendent of schools.
- MR. WALTER C. GARLAND has been elected superintendent of schools at Burband, Ohio.
- SUPT. E. M. OTIS, of Willoughby, Ohio, has been re-elected for the next year.
- MR. H. E. JACOBSON, of Parkers Prairie, Minn., has been elected superintendent of schools at Elgin.
- SUPT. W. M. CHANDLER, of Bullard, Tex., has been re-elected for another year.
- MR. G. S. SANDERS has been elected superintendent of schools at Holdenville, Okla.
- MR. CLIFFORD D. DEAN has been elected superintendent of schools at Lawrence, Kans.
- MR. JOHN W. BROOKER has announced his candidacy for the Democratic nomination for State Superintendent of Public Instruction of Kentucky.
- MR. G. L. FOX, of Schoharie, N. Y., has been elected superintendent of schools at Dover, N. H.
- SUPT. L. H. LAMB, of Flint, Mich., has been appointed as co-ordinator between the Rackham sociological research unit and the Rackham Guidance Project in Flint.
- SUPT. J. RALPH IRONS, of Evansville, Ind., has been re-elected for a six-year term.
- SUPT. ARNETT CROSS, of Clinton, Okla., has been re-elected for a three-year term.
- SUPT. AARON DEMORANVILLE, of Johnston, R. I., has been re-elected.



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● Similar in basic design, these stands provide — direct vertical support for each seat and foot board, continuous from seat to floor — automatic locking in the open position and master keyed locking when closed — uniform rise of seat rows to assure full visibility of playing floor, plus ease and safety of entering and leaving the stands — extreme rigidity, due to our diagonal and X bracing of each steel upright against sway — low maintenance cost for owners; complete safety for guests

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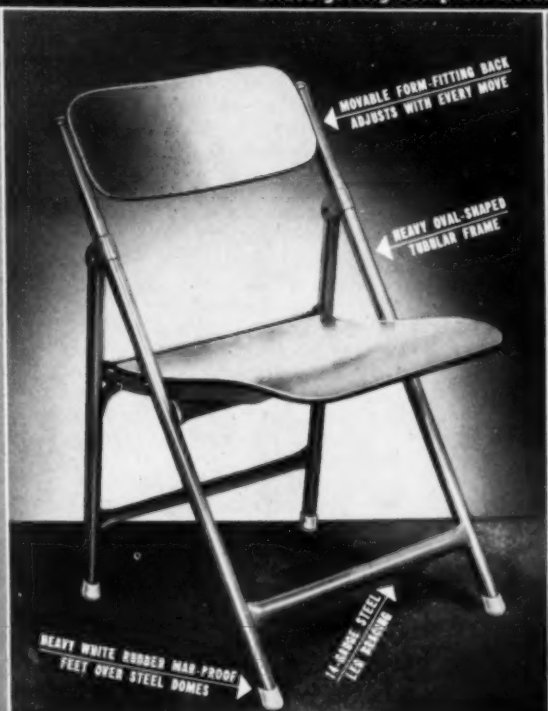
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**NEW STURDY
 STEEL CABINETS**

*At Unprecedented
 LOW PRICES*



\$18.75

F. O. B. Factory
 Shipping Wt., 133 lbs.

● Because built on a mass production basis, with tools used in producing Lyon Lockers, these sturdy, attractive cabinets—ideal for safe storage of school supplies or clothing—can be offered at \$18.75. Available in 1-shelf wardrobe and 4-shelf cabinet models—shipping weight 133 lbs.—they represent unusual values; enable you to modernize while you economize.

LOCKER BENCH . . .

Provides both locker and work bench facilities in space ordinarily occupied by bench only. Help to prevent ganging or crowding. Suitable for all types of vocational departments.



LOCKERS . . .

Types for every school locker need. All "school proofed" with strong, rigid frames, doors that are silent in operation and remain in perfect alignment, and durable baked enamel finish. The first cost is the final cost.



FOLDING CHAIRS . . .

Lyon Posture Perfect Folding Chairs are ideal for auxiliary school seating equipment. They encourage correct posture, are restful, quiet and strong. Available in attractive one and two tone colors.

LYON *Service*
 SCHOOL EQUIPMENT

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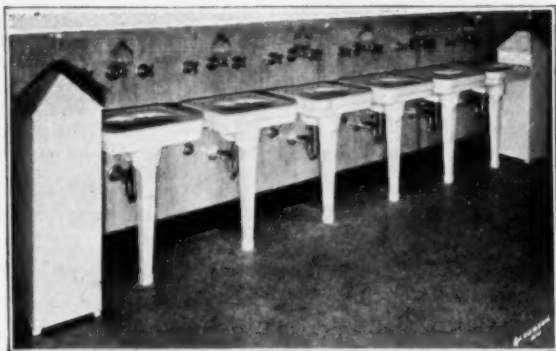
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SOLAR Receptacles Essential For Washrooms



Easy to Use



Easy to Use

Easy to use and easy to empty. Rid schools of unsightly waste and litter. A constant inducement to keep surroundings neat, clean and tidy. Fireproof, odorproof, vermin-proof. The swinging top opens at a touch and silently closes again. Make for greater efficiency and orderliness in every part of the school.

Write today for full information on these modern (all steel) self-closing waste receptacles. No obligation.

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or Wherever
Waste
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SOLAR-STURGES MFG. CO.
Melrose Park, Illinois



PICTURE OF A SCHOOL SUPERINTENDENT *Worrying*

ABOUT HIS

FLOOR MAINTENANCE PROBLEMS

OF course he isn't worrying! Why should he? Not so long ago he invited a Car-Na-Var Floor Expert to make a complete check-up of his floor maintenance methods. Today, his floors look better than ever while labor and material costs have been substantially reduced.

Why not let an expert put an end to your floor maintenance worries? Just write to

CONTINENTAL CAR-NA-VAR CORP.

1566 E. National Ave.,
Brazil, Indiana, Makers of—
World's Largest Mfr. Specializing
Heavy Duty Floor Finishes



HOW BUDGETS SHOULD BE PREPARED AND FOLLOWED

(Concluded from page 45)

special occasion and legitimate channel should be utilized to inform the public of the current and anticipated educational activities.

Objectors to educational activities will seek information; it must be presented to supporters.

The clear relationship of cost to service should be maintained.

Approval of the budget in advance avoids public discontent.

The conference method of presentation, well supported with factual information graphically presented, is most effective. An illustrated pamphlet presenting services with budget is an excellent method of presentation to the general public.

PROGRESS IN THE MEDIA TOWNSHIP COMMUNITY SCHOOL

The fiftieth anniversary of the founding of Wever Academy at Media, Ill., was observed in May, 1939. This institution which is now known as the Media Township Community High School, will commemorate its founding and the educational work of its founder, in a historical pageant to be presented in October next.

In 1889, Mr. Nathan Wever, a bachelor, founded the Media Wever Academy, using his earnings to establish a school which in his own words would "furnish an opportunity for a more extended education than that of the common schools, and would extend thorough preparation for a required college course, would furnish sufficient training for teachers, and would give a general business education sufficient for a farmer, mechanic, merchant, or other business or occupation." Mr. Wever made an endowment of buildings and grounds and a 240-acre farm, the funds of which were to be used for the school.

In 1917, the Academy was reorganized as a high school, and the institution became publicly supported. In 1930, the original building burned

to the ground and a modern brick structure adapted to the new instructional program was erected in its place. The school now offers a general educational program, which meets the standards of the state school laws and of the requirements of the midwest standardizing agencies. Seventy-five per cent of the students end their formal education upon graduation and 25 per cent continue in various liberal-arts colleges, teacher-training institutions, technical schools, or universities. The present school has an enrollment of 106 students, a faculty of seven teachers, a superintendent, and a librarian and office assistant.

Thirty-six girls are enrolled in the homemaking department. During the winter of 1938-39, eleven evening-school programs were held, with an average attendance of over forty girls and homemakers in the community. On March 28, the girls, under the direction of the instructor, planned and served a formal banquet to nearly two hundred persons.

The high-school building is regularly used for supervised dancing programs for the older and younger persons of the community. A number of educational adult features are conducted during the day and at night, and a wholesome, constructive program is the theme of the activities.

During the past several years, the superintendent of schools and his wife have taken the seniors on an educational tour. For the current year, a trip to the New York World's Fair has been planned. Money for the transportation is earned each year by plays and amateur programs. The trips are considered a means of enriching the senior-class work and properly climaxes the four years of high-school work in valuable fields.

A noon activity and recreational program is conducted throughout the school year, under the direction of the teachers. A committee representative of the student body and the faculty is in charge of the program which accommodates the majority of the students who bring their lunches from home. The activities include recreation adapted to the season and the weather condi-

tions. Funds for the program are secured through the proceeds of an all-school carnival held each fall. The program has proved a great help to noon-hour disciplinary problems.

A Smith-Hughes Vocational Agriculture program has been in operation since the summer of 1935. Data compiled for the third year of operation include a progressive growth, with total earnings of \$5,400. Over \$850 of this was earned in prize money at the State Fair and two local fairs. Plans have been made for the construction of a farm shop as part of the program in agricultural education.

A combined community and high-school orchestra was organized at the beginning of the school year 1938-39 in order to stabilize the instrumental music. The plan provides a large orchestra which enlists community support in the spirit of the institution.

A seven-acre tract has been purchased for a permanent athletic field and plans are being made for a football field, a running track, baseball and softball diamonds, and tennis courts.

All of the various activities have been arranged and carried out with the support of the superintendent, Mr. Harold D. Holstine, and the members of the school board of Media Township. The program has enlisted the genuine support of the community which has less than two hundred population but enjoys a high school that radiates its influence for an average of eight miles into the surrounding country.

● SUPT. E. A. LEWEY, of Nokomis, Ill., has been re-elected for another year.

● MR. C. C. EDMUNDSON, JR., of Folsom, N. Mex., has been elected superintendent of schools at Cimarron, N. Mex.

● SUPT. JAMES H. HARRIS, of Pontiac, Mich., who is retiring this year as superintendent, was tendered a dinner on May 18 by the Pontiac teachers' club.

● MR. D. T. SMITH, of Gladewater, Tex., has been elected superintendent of schools at Atlanta, Tex.

● MR. W. F. HENIZE, of Mt. Orab, Ohio, has been elected superintendent of schools at Fayetteville.

● SUPT. H. B. GALBRAITH, of Uhrichsville, Ohio, has been re-elected for a two-year term.



Bruce Leadership in Industrial Arts

Bruce leadership in Industrial Arts is the result of twenty-five years of continuous and conscientious service to the school shops of America. Twenty-five years which have seen our list expand to keep pace with the splendid advances in the progress of the school shop until today shopmen turn to us for the solution to their textbook or project-book needs whether in woodwork, furniture making, metalwork, pottery, leathercraft, or any of the other activities of the modern school shop.

Popular Industrial-Arts books from our current list.

FUNDAMENTALS OF LEATHER-CRAFT by Ross C. Cramlet

Everything the beginner needs to know to do clever and useful leather work. \$1.00

POTTERY MADE EASY

by John W. Dougherty

The whole fascinating craft is put before young craftsmen in this teach-easy, learn-easy presentation. Includes directions for making necessary potter's equipment. \$2.25

RUSTIC CONSTRUCTION

by W. Ben. Hunt

Full directions for making clever and serviceable rustic furniture and outdoor decorations out of slab lumber. Includes benches, chairs, tables, fences, gates, bridges, etc. Illustrated by photos and clever sketches by the author-artist.

Paper, 50 cents; cloth, \$1.00

FURNISHING THE HOME GROUNDS

by Ken F. Shepardson

Outdoor furniture adapted from popular commercial designs. Work involves simple operations, common hand tools, and standard dimensioned, lumber stock. 80 cents

FORTY PIECES OF FINE FURNITURE

by Herman Hjorth

Adaptations of classic designs with full construction directions. \$2.50

PROVINCIAL FURNITURE

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A collection of simplified designs of the popular French provincial styles by the authors of the popular COLONIAL FURNITURE.

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50 POPULAR WOODWORKING PROJECTS

by Joseph J. Lukowitz

Simplicity is the keynote of these projects which are always favorites with boys in the author's classes.

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Instructions for making many useful articles of graceful design from tin cans!

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Thirty authentic, original Indian articles youthful craftsmen love to make. \$2.00

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THE LOW COST OF THIS SOILPROOF WALL

IS SWEET MUSIC TO SCHOOL BOARDS

IMAGINE a permanent wall covering that doesn't crack or chip when bumped by furniture, with a surface that doesn't take ordinary stains, and can be washed clean as new. That's Linowall—and it costs only half as much as other permanent materials.

Linowall is a special wall covering with many of the desirable characteristics of linoleum. You'd think it was just made-to-order for schools. It never has to be refinished. It is flexible and easy to install over old walls.

We think you'll want to know more about Linowall, so send today for complete information. Write Armstrong Cork Company, 1212 State Street, Lancaster, Pennsylvania.



Armstrong's LINOWALL

Made by the Makers of Armstrong's Linoleum

WAYS TO SAVE ON BUILDING MAINTENANCE AND UPKEEP

(Concluded from page 56)

back onto the back legs and loosened up in the joints.

3. Rickety old stepladders are commonly found in schools. Stepladders should be of a substantial type. All ladders should be equipped with safety treads.

C. Principal and Teacher Cooperation

1. There should be a definite understanding, by means of a set of regulations, as to the janitor's duties.

2. Sometimes teachers and principals cause endless work for the janitor. This makes the difference between so called "easy buildings" and "hard buildings."

3. Some teachers and principals allow the students to throw paper, trash, and leftovers from lunch on the floor of classrooms and corridors.

4. Odds and ends on teachers' desks discourage good dusting or make it impossible.

5. Teachers can do much to discourage the tracking in of outrageous quantities of mud from playgrounds and the street.

6. Teachers can form the habit of leaving the window shades in their room at proper height at close of day. They can save wear and tear on the shades by handling them themselves. A shade should never be pulled down in front of an open window. Years of wear to that shade will result.

7. Great economies in the use of artificial light in classrooms can be effected by a little careful observation on the part of the teacher and principal.

8. Much coal goes up the stack because teachers fail to readjust thermostats or close windows.

9. Nothing is more important than well-planned and well-executed fire drills. On the average, five schoolhouses burn every day. There would be tremendous loss of life were it not for the fact that four out of five of these fires happen at night.

10. Most large school fatalities from fire have been caused by blocked exits. No fire-drill program is complete that does not include drills including blocked exits. Each exit in turn should be found to be blocked by the line which had expected to use it. They should be trained to back track in an orderly manner and use another exit without endangering other lines.

11. Teachers and principals insist in the storage in basement, under the stage, or in the attic of large quantities of used decorations. These are a bother to the janitor and form a fire hazard.

D. Board-of-Education Cooperation

1. Too few janitors supplies are furnished. Not many are needed, but those needed should be furnished with the understanding that they will be used.

2. Constant changes are made in the brands of supplies. This results, usually, from the activities of "the price cutter." Too often, he must add water or substitute in order to make his price attractive. Purchase of supplies stocked locally is often expensive.

3. Janitors are unwisely prevented from attending Janitor-Engineer Schools and other self-improvement meetings.

Experience has shown that there are many wrong, harmful ways of doing janitor jobs. Only a few easy, safe ways exist. Time and money can be saved through proper janitor-engineer instruction.

Not all of these suggestions, listed above,

apply to the buildings in your city. We do feel that such as do apply should, as far as possible, be made in order that you may get the best possible return on your expenditure for the maintenance and upkeep of your buildings.

CONNECTICUT SCHOOL BOARDS MEET

The semiannual meeting of the Connecticut Association of Boards of Education was held on Saturday, May 6, at the Troup Junior High School, New Haven. Mr. Stanley P. Mead, president of the association, acted as presiding officer. About 130 members of school boards were present out of a membership of 170.

The sessions took the form of discussion groups, each in charge of a chairman. The discussions centered on relations of board and superintendent, public relations, insurance and financial adjustments, and changing conditions and trends affecting the public schools.

Among the important speakers who appeared on the program were Governor Raymond E. Baldwin, Dr. Alonzo G. Grace, Commissioner of Education, and Mr. Noah Swayne. A report was read on the findings of the special committee which has investigated teacher preparation facilities in the state.

NATIONAL RECREATION CONGRESS GOES TO BOSTON

The twenty-fourth annual meeting of the National Recreation Congress will be held October 9 to 13, in Boston, Mass. Dr. John H. Finley, president of the association, will preside, and it is expected that 1,500 persons will be in attendance.

The morning sessions will be devoted to the discussion of major problems pertaining to recreation and to reports of the committees. The evening sessions will include addresses by outstanding speakers on topics related to recreation. Special tribute will be paid to Mr. Joseph Lee, for twenty-seven years president of the association.

ONE TENNANT MACHINE

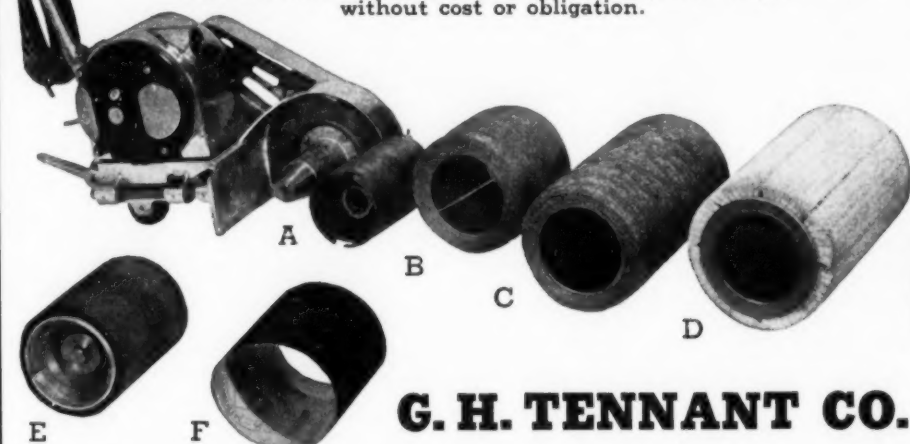
Does the Whole Job of School Floor Maintenance

**Burnishes seal, wet or dry—polishes—waxes
—scrubs—sands. No dust.**

The Tennant machine cleans the heaviest traffic floors without the use of water. The attachments, shown below, can be exchanged quickly without the use of tools.

(A) buffing drum; (B) steel-wool buffing roll which is factory-made, uniformly compressed and ready for immediate use, either 8-inch or 16-inch; (C) depending on friction required; (D) 16-inch brush; (E) sanding drum; (F) sandpaper sleeve ready for use.

Write today for names of users in your locality. Our experienced representative will demonstrate the Tennant system for you without cost or obligation.



Shown here is the Model C, ideal for most schools. Other sizes are available.

G. H. TENNANT CO.

1801 Marshall St. N. E.,

Established 1870

Minneapolis, Minn.

SCHOOL DISCIPLINE EXTENDS BEYOND THE SCHOOL GROUNDS

(Continued from page 26)

High-School Fraternities and Sororities

The courts have been called upon in several instances to determine the constitutionality of statutes prohibiting fraternities and sororities. They are Arizona, Indiana, Iowa, Illinois, Maine, Kansas, California, Colorado, Michigan, Minnesota, Montana, Nebraska, New Jersey, Oklahoma, Oregon, Ohio, and Rhode Island. Of these states Iowa, California, Minnesota, Oklahoma, and Rhode Island make exceptions for certain types of societies.

The statute law was tested in the State of Iowa. The plaintiff and other members of a high-school fraternity were excluded from the high school for the violation of a rule adopted in accordance with the statute. The court said:

Since the rule is nothing more than a re-enactment of the statute, and the creation of perfectly natural methods for performing the duties placed upon the board by the statute, and since the statute itself is valid, the rule cannot be invalid for being either unreasonable or in excess of statute authority. We hold that the statutes are not unduly paternalistic, and that it is their ultimate object to raise the school privilege to its highest possible efficiency.¹²

It has been held by the courts that a board of education may limit the privileges of pupils who belong to fraternities. The case of *Wilson v. Board of Education of Chicago* is to point. A rule was adopted by the board denying the pupils belonging to secret societies the right to participate in school activities. An action was brought to enjoin the board from enforcing this rule. In denying the injunction the Supreme Court of Illinois said:

It is the province of the board of education to determine what things are detrimental to the successful management, good order, and discipline of the schools and the rules required to produce these conditions. It was the judgment of the superintendent of schools of Chicago, as well as of the board of education, that membership in secret societies, known as Greek letter fraternities or sororities, was detrimental to the best interests of the schools. Whether this judgment was sound and well founded is not subject to review by the courts. The only question for determination is whether the rules adopted to prevent or remedy the supposed evil was a reasonable exercise of the power and discretion of the board.

Assuming as we must, that the adoption of the rule was not an abuse of power or discretion conferred by law upon the board, the courts cannot and should not interfere with its enforcement. Pupils attending the schools may decide for themselves whether they prefer membership in the secret societies, with the disqualification from representing their schools in literary or athletic contests or other public capacities, or whether they prefer these latter privileges to membership in said societies. It is for the board of education, within reasonable exercise of its power and discretion, to say what is best for the successful management and conduct of the schools, and not the courts.¹³

In the case of *Favorite et al v. The Board of Education of Chicago*, the preceding case is pointed to as authority by the Supreme Court. The judgment of the Appellate Court in affirming the decree of the circuit court was upheld by the Supreme Court as follows:

The questions raised upon this record are identical with those raised in the case of *Wilson v. Board of Education of Chicago*, and the decision in that case is decisive of this case. In accordance, therefore, with the holding of this court in that case, the judgment of the Appellate Court affirming the decree of the circuit court will be affirmed.¹⁴

Wayland v. Hughes is a case of record which upholds the right of the school to deny to pupils

belonging to fraternities privileges of the high school, except that of attending classes. The Supreme Court of Washington ruled in part:

The board has not excluded the appellant from the Seattle High School, neither has it threatened to expel or suspend him. He can and does attend school, and under our construction of the rules adopted, he is at the same time permitted to continue his membership in the Gamma Eta Kappa Fraternity, although in doing so he opposes the authority of the board, and thereby forfeits certain privileges which are no necessary part of the curriculum or classwork, from which he is not excluded. The respondents are only seeking to prevent the appellant and his associates from dictating the terms in which they shall enjoy certain privileges which are merely incidental to the regular schoolwork, and this they have the authority to do. The board has not invaded the homes of any pupils, nor have they sought to interfere with parental custody and control. They have not said these fraternities shall not meet at the various homes, nor have they attempted to control students out of school hours.

The evidence . . . overwhelmingly established the fact that such fraternities do have a marked influence on the school, tending to destroy good order, discipline, and scholarship. This being true, the board is authorized, and it is its duty to take such reasonable and appropriate action by the adoption of rules as will result in preventing these influences.¹⁵

The courts have been in agreement in the case thus far stated, but on the other hand the Supreme Court of Missouri held a rule prohibiting members from representing a school in any capacity unreasonable. The case of *Wright et al v. Board of Education of St. Louis* is in disagreement. Justice Walker said:

This is an action brought by certain taxpaying citizens of the city of St. Louis, who are residents of a district tributary and who have children attending one of its high schools, who pursue regular studies therein for the purpose of completing the course and graduating therefrom. The purpose of the action is to enjoin the board of education of said city from enforcing a rule adopted by it, declaring that pupils who become and

¹²*Wilson v. Board of Education of Chicago*, 233 Ill. 464, 84 NE 697, 15 LRANS 1136.

¹³*Favorite et al v. Board of Education of Chicago*, 235 Ill. 314.

¹⁴*Wayland v. Board of Directors*, 43 Wash. 441, 86 Pac. 642, 7 LRANS 352.

¹⁵*Lee v. Hoffman*, 182 Iowa 216, 166 NW 565, LRA 1918, 933.

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No. 9566—Cabinet and Supply Case

remain members of a high-school fraternity are rendered ineligible to membership in any organization authorized and fostered by the school and are not entitled to represent it in any manner or participate in any of the graduating exercises. Upon hearing before the Circuit Court of City of St. Louis the plaintiff's petition was dismissed and the board as consequence was held authorized to adopt and enforce the rule in question, having been demonstrated, a discussion of its discretion is rendered unnecessary. Either by reasonable implication or direct repression, the limits of that discretion may readily be determined from what has heretofore been said. It will suffice, therefore, to say it should extend no further than may be found reasonably necessary to promote the intelligent conduct and control of the school, as such, within the domain we have offered. Any other interpretation would remove all limit to the exercise of discretionary power, leaving it to the judgment, whims or caprice of each succeeding board. We have not reached that point in the interpretation of a delegated power where, with a proper regard for the rights of citizens and the rules of construction, we feel authorized in holding as was held in *Wayland v. Board, supra*, that the board's power is to be limited only by its discretion free from any determination by the courts.

From the foregoing it follows that the plaintiffs are entitled to the relief sought.

We, therefore, reverse and remand this cause, with direction to the circuit court to set aside its judgment and enter a decree herein perpetually enjoining the respondent from in any manner enforcing the rule in question.¹⁷

Summary

The courts have been called upon in many instances to determine the extent to which the authority of the school may legally extend beyond the limit of the school grounds and school hours. In the absence of statutes the school and home have looked to the courts for interpretation of the school's authority. Legislative bodies and the courts have ever upheld the sanctity of the American home and are slow to impose rulings which might impair its place in our social structure.

The points upon which the decisions handed

¹⁷*Wright et al v. Board of Education of St. Louis*, 295 Mo. 466, 246 SW 43, 27 ALR 1061.

down by the courts of law have turned, have been twofold, namely: (1) The acts for which a pupil is punished must have an immediate and destructive effect upon the discipline and efficiency of the school. (2) Rules and regulations must be reasonable.

It is an established principle of common law that the school authorities may punish pupils for acts carried out off the school grounds and outside of school hours which impair the discipline and efficiency of the schools. It is equally true that the regulations of the school must be within reason.

A school regulation which might satisfactorily operate in a large city system might conceivably be unreasonable in other circumstances. It is to be noted that the courts did not at any time question the findings of the board of education. They did not act as a court of review, but based their rulings upon the reasonableness of the regulations imposed in each case.

Since it is difficult to define and predict the activities of the pupils of a school system, it is evident that no statute could be couched in terms which would be all inclusive of the extramural disciplinary problems which might arise. Lacking satisfactory statutory provisions the schools and students must look to the courts for an interpretation of case. Each case must stand or fall on its own merits. In the absence of precedents, the line separating teacher and parent jurisdiction must carefully be considered. What constitutes behavior detrimental to the school must be determined by the courts.

The problem of what constitutes disorderly behavior, still remains, even in states granting extramural authority by statute law.

The courts have upheld the right of the school to punish pupils by suspension or otherwise for the following:

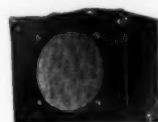
1. Using disrespectful language about the principal in his hearing and in the presence of fellow pupils.
2. Quarreling and using profane language on the way to and from school.
3. Annoying fellow pupils.

MADE TO DELIVER a specific service to schools

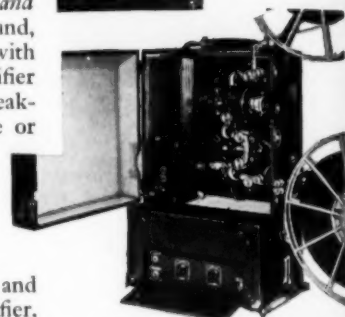
This 16 mm. HOLMES projector with interchangeable unit system makes HOLMES equipment applicable and convenient for all school uses.

For Class Rooms, Assembly Halls and Lecture Tours, pictures without sound, projector unit only—for pictures with sound on film, projector and amplifier locked together and one or more speakers—for portable public address, one or more speakers, amplifier and turntable or one or more microphones.

Auditoriums, Gymnasiums and Athletic Fields, public address systems, music, scores, etc., amplifier and one or more speaker units—amplifier, one or more speakers and turntable—amplifier one or more speakers, microphones.



Speaker Unit



Projector and Amplifier in compact case. Weight complete with speaker case, 60 lbs.

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Manufacturers of 16mm and 35mm sound projectors

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CHICAGO



16 mm and 35 mm

4. Immoral conduct.
5. Contracting social diseases.
6. Being drunk during holidays.
7. Violating rule prohibiting football.

The courts have disagreed on the right of the school to require home study. In two instances they have upheld the school and in two others, the pupil. The decisions turned on points not directly connected with the dicta of the courts.

It has been held by the supreme courts in two instances that the school could require pupils to go home immediately after dismissal.

Again the courts have not concurred in the right of the pupil to publish newspaper articles about the school in the right of the pupil to have ruled against the right of the school to punish in one instance and upheld the school's authority in two others.

Since it is impossible to set up statutes to meet each situation, it becomes the duty of the school to judge carefully the problems of extramural discipline which become pertinent. It must be recognized that before a court of law the defendant must point to statute or in the absence of statutes, to basic common law principles.

NEWS OF OFFICIALS

● Mr. H. C. HICHMAN has been elected as a member of the board of education at Boulder, Colo. He succeeds Dr. P. G. Worcester.

● Dr. R. M. GILMORE has been elected president of the board of education at Kearney, Nebr. J. J. SHAMBAUGH was re-elected secretary.

● Dr. FRANK W. PLEHN has been re-elected president of the board of education at Scottsbluff, Nebr.

● Dr. EARLE G. JOHNSON has been elected president of the board of education at Grand Island, Nebr. WILLIAM RABE was elected vice-president, and A. B. NEWELL was re-elected secretary.

● Mr. JOHN T. KENERIGAN has been re-elected president of the board of education at Ashland, Wis.

● Dr. HENRY MARTIN has been re-elected president of the board of education at New Britain, Conn.

● Mr. EARL STAFFORD has been elected president of the school board at LaJunta, Colo. GLENN CHRISTIAN was named vice-president; J. H. MACDONALD was re-elected treasurer, and Dr. A. S. HANSON was named secretary.

Behind the Scenes

This picture, taken in our factory, shows Walrus men assembling student chemistry desks. These desks are made in many sizes, arranged for two or more students. The desks are equipped with Alberene stone sinks, acid and heat resisting table tops, gas and water service, reagent racks and all other appliances necessary for the modern school chemistry department.



The particular desks pictured above are for shipment to schools at Winston-Salem, N. C. How can you know that *your* purchase of Walrus furniture will protect your reputation as a good buyer? It's a specialty that begins with the curing of lumber and goes through an infinite number of separate steps and construction details to the completion of a job which will credit you with good judgment. Our catalog gives details—and lists other prominent schools equipped by Walrus. Why not send for this catalog and make some private inquiries, too? We are proud to have our products investigated.



WALRUS MANUFACTURING CO., DECATUR, ILLINOIS

A SIMPLE PLAN OF PUPIL ADJUSTMENT

(Concluded from page 30)

Employed by a trucking firm, he could not be at home regularly, and regretted that Y and his mother had kept the situation from him. Following his reinstatement sufficient improvement was made to enable the boy to remain in school until the end of the term, passing two subjects.

At the opening of the present term Y employed the same tactics which required his temporary suspension last year. Before the close of the first grading period his home was informed that unless there was an immediate improvement in attitude and industry it would be necessary to request Y's withdrawal from school.

His mother came to inquire why all the teachers kept picking on her son. When the case was unfolded from our records, she began to cry, saying that if only her husband would take an interest in the boy things would be so much better. When Y joined the conference, he admitted that he had been untruthful in reporting his activities to his parents. He insisted that if provided with glasses he would guarantee good marks and exemplary conduct. Glasses were provided. The office was pleased to report improvement for three weeks. Then Y resumed his former objectionable attitude in class, study hall, and elsewhere about the building.

A letter detailing these incidents brought no response from home; nor was there improvement in his attitude. When it became so clearly apparent that our efforts were being wasted, Y was suspended from school and his father was notified that his son could be reinstated only upon written application to the board of directors requesting them to review the case. Thus ended the case.

Some Conclusions

Under the program described, the teacher benefits by reducing her diagnosis and

remedial procedures to writing, and by being informed of the disposition of each case by the office. The pupil benefits by being considered an individual, rather than a pawn. He usually responds favorably to what is expected of him. The parent is favorably impressed by the specific record of patient efforts on the part of the school to aid the child's development. The entire tone of the school is improved because pupils get more satisfaction in purposeful planning and achievement than in frivolities of the moment. By being kind at all times, and firm when necessary, the staff gains the respect of pupils and the admiration of patrons.

SCHOOL FORESTS

New York State has 215 school district forests planted and operated by school children. The purchase price of these forests was from \$4 to \$10 per acre.

Mr. Robert P. Holdsworth, of the State Education Department, suggests to school authorities that school forests be approximately 20 acres in size, and that land upon which young forests are growing be chosen so that forest care and cultivation may be undertaken by the children. Old and mature forest stands may be valuable but are not necessary. A school forest may be effective even if it is only four or five acres in extent.

Writing in the *New York Bulletin to the Schools*, Mr. Holdsworth suggests that the school forest is primarily a laboratory for the study of natural history where woody shrubs, vines, small herbaceous plants, ferns, mosses and fungi, birds, insects, and animals may be observed.

"In a larger sense, however, the forest is a workshop for the building of good citizenship. It is a place where the conservation of a great and renewable natural resource can be learned through

active participation in forestry. Thrift can be taught in a most practical sort of way through the development of an understanding of the relationships between growth and harvest. The student of natural history need not be the only one whose interest is aroused and kept through the school forest. There are always small jobs of surveying to be done and the various problems in tree measurement have both interest and practical value. And at times when timber is to be harvested the help of the mechanically minded and very practical student is always welcome. Good business management is a part of forestry and this element can well be taught in connection with a school forest. One can think of few experiences more stimulating to the young person than to have an opportunity to spend his growing years in the environment of a healthy, growing forest.

"It is easy to theorize on the school forest but another thing to acquire one and begin its development. It is because of this difficult acquisition stage that more school forests are not in existence today. Once the necessary forest land is obtained, however, even though in some cases it may be only a few acres of old field which must be planted, a most interesting, thrilling, and altogether worth-while venture awaits generation after generation of school children who will learn there, to the advantage of themselves and the community, that he who practices the care and cultivation of the natural resources of the forest is a good citizen."

• The school board at Tomahawk, Wis., has re-elected Dr. G. R. BAKER as president. MRS. LILLIAN ZEITELHACK was named secretary.

• Mr. R. M. CAMPBELL has been re-elected president of the board of education at Columbus, Nebr. JAKE GLUE was re-elected vice-president, and Dr. F. H. MORROW was named secretary.

• Mr. A. J. WOOLFORD, president of the school board at Terre Haute, Ind., was presented with a carved walnut gavel, at a meeting of the board on May 24. The gavel was made by the students of the industrial arts department of the Garfield High School.

YOUR School Should Have These Modern Sanitary Group Wash Fixtures, Too, Save Water and Maintenance

The Mastick School of Alameda, California, is another of the hundreds of Schools and Colleges equipped with modern, sanitary, group washing fixtures—Bradley Washfountains.

With these fixtures a group may wash at one time, each in his own running spray of water . . . There is no chance of contamination—a central drain preventing collection of water in the bowl. Water consumption is reduced, there are fewer piping connections and maintenance is lower.

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EQUIPMENT AND SUPPLIES FOR SMALL SCHOOLS

(Concluded from page 21)

this phase of the problem thoroughly for themselves. A number of state departments have prepared such lists and have presented them in connection with their elementary- or high-school standards. Unfortunately such lists now commonly include only names of equipment and do not go beyond that. Nevertheless, they are helpful in indicating the types of equipment needed.

Those who are interested in investigating this field will find already compiled many suggestions and lists. Some of these will be found in bulletins issued by their own state department. They should also consult various publications of the National Association of Public School Business Officials. Bulletin No. 5 issued in 1934 devoted to "Tests of Quality for School Equipment and Supplies" has a chapter devoted to equipment and supplies used in schools and refers to a number of standards lists which had been prepared at that time.

The most recent and helpful publication which

gives a comprehensive list of reference which discuss such equipment is probably the October, 1938, *Review of Educational Research*, which was devoted to the "School Plant and Its Equipment." Chapter II prepared by R. W. Hibbert is devoted to "Equipment, Apparatus, and Supplies." This is accompanied by nearly five pages of bibliography referring to practically all articles published during recent years which have given attention to the matter. Chapter II summarizes some of these under such topics as classroom equipment, classroom seating, nursery-school and kindergarten equipment, school office and library, school auditorium and stage, the school cafeteria, the school radio, pictures and sound, physical-science equipment, household-arts equipment, industrial-arts equipment, physical education, music, commercial subjects, and school supplies. Much of this discussion is practically as applicable to small school systems as to larger school systems.

Summary

In many cases the problem of providing satisfactorily and economically the equipment needed

by small schools can be solved by giving proper attention to the matter of more satisfactory organization of schools and local school units. Small schools will continue, however, for many years in nearly every section of the country and, therefore, attention must be given to the problems of the small school in addition to attention to these other matters.

The small school faces particularly acute problems when it comes to selecting and purchasing equipment. It is almost impossible for small schools acting alone and individually to secure satisfactory equipment at an economical price.

Purchases should usually be made on the basis of specifications. Here again small schools are at a disadvantage because of the difficulty of preparing and sending out satisfactory specifications. Cooperative effort is almost essential if the small school is to obtain any of the advantages which are usually available to a larger school system. The greatest hope for helping to solve the problem of the small school system seems to lie in the possibility of the state department of education taking the leadership. The department should be in position to get the cooperation of small school systems, to select federal specifications that are applicable, to develop other specifications, to prepare and select from federal lists manufacturers of school equipment who are willing to certify that specifications will be met, to prepare supplementary lists of such manufacturers, to prepare and carry out tests, and even to be of assistance in developing a cooperative plan for making purchases.

SHOULD STANDARDS BE ADOPTED FOR STENCIL DUPLICATED CLASSROOM MATERIALS?

(Concluded from page 53)

impress upon us the need for having our stencil duplicated materials well reproduced, well spaced, clear, and well worded. There is no place in the modern school for poorly duplicated material. In all the tests made with the specimen pages, the results indicated that poorly done material was not in harmony with current methods for improving reading comprehension. Furthermore, since stencil duplicated material is being more and more used in the classroom, its form and appearance should be equal to the perfection of style incorporated in the printed page of the modern school book. Standards should be set for stencil duplicated materials. The standards should be similar to Specimen A in this study and should be acceptable for use with present-day methods of developing reading habits and comprehension.

PERSONAL NEWS OF SUPERINTENDENTS

- MR. E. O. HIGGINS of Lebanon, Ind., has been elected superintendent of schools at Greenfield, Ind., to succeed Z. M. Smith.
- MR. RAYMOND S. FINLEY has been elected superintendent of the Madison-Skowhegan schools, at Madison, Me.
- SUPT. WARREN A. SHERMAN, of Warwick, R. I., has been re-elected for another year.
- MR. GORDON L. FOX has been elected superintendent of schools at Dover, N. H., to succeed Chester L. Howe.
- MR. C. C. SCOFIELD has been elected superintendent of schools at Burwell, Nebr.
- MR. O. E. DUNCKEL, of Manchester, Mich., has been elected superintendent of schools at Farmington.
- MR. CLAUD V. COATS, of Greenville, Mich., who is retiring from the school service on July 1, was the guest of honor at a dinner, at which he was the recipient of a gift.
- MR. W. H. POWELL, of Alapaha, Ga., has been elected superintendent of schools at Nashville, Ga.
- MR. R. L. TODD, of Ashburn, Ga., has been elected superintendent of schools at Sandersville.
- SUPT. PAUL M. MUNRO, of Columbus, Ga., has been re-elected for another term.
- MR. GRANT B. KEEFER, superintendent of schools of Grant, Mich., died in a hospital, on May 13. He had served as superintendent at Bear Lake and East Jordan before going to Grant.
- SUPT. JOHN U. DUNGAN, of Lockland, Ohio, has been re-elected for another year.

SCHOOL ROLLS DROP IN CHICAGO

Statistics compiled from records of the Chicago board of education, the Catholic board of education, and the Cook County superintendent of schools indicate that the birth-rate drop has cut the scholastic roll by 100,000. The decline is attributed by authorities of all three bodies to the declining birth rate. In 1927 the birth rate in Chicago was 19.6 births for every 1,000 persons. In 1933 it dropped to 13.4, and in 1938 it increased to 14.3.

In 1928 there were 614,262 elementary-school pupils in Cook County. Today there are 514,064. The greatest decline has been in the Chicago public elementary schools, which had 363,920 in 1928, and 291,527 in the last school year. This is a drop of 19.9 per cent.

The decrease in the Chicago schools is attributed not only to the declining birth rate but also to migration of families to the suburbs.

In the Catholic schools the decline in enrollment has been 12 per cent.

BOARDS OF EDUCATION

♦ Dodge City, Kans. The board of education has approved a tuition-free summer school of two months. The summer session will be divided into four divisions as follows: (1) a curriculum for high-school students who desire to make up lost credits, (2) a division for remedial work in the ninth grade or junior high school to permit of admittance to the senior high school next fall, (3) a division for sixth-grade pupils who desire to take remedial work for admittance to the junior high school, and (4) a leisure-time program for unemployed students during the summer months.

♦ Kansas City, Mo. The board of education has begun a study of its financial situation in order to determine whether it will be possible to offer a nine-month term of school next year. The board plans to curtail its expenditures wherever possible, but will not inaugurate radical economies which may disrupt the curriculum. It is planned to retain the present pay roll and to effect the necessary economies in other items of expense.

♦ George Rice has been a member of the school board of the Frost school district, near Portland, Mich., for over sixty years. He was made the guest of honor at a picnic, given by the citizens, and presented with a birthday cake on his 81st birthday.

♦ Birmingham, Mich. The board of education has voted to continue the dual system of control in local education, which has been in operation for many years. The superintendent is in direct charge of all educational policies and program, and the business manager is in full control of the physical properties, and all custodial services. Both of these officials are responsible directly to the board.

♦ Garden City, Kans. The school board has voted to pay teachers on a twelve-month basis, beginning with the new school year. Formerly, the teachers were paid in nine and ten monthly payments.

♦ Houston, Tex. The school board has adopted a suggestion of Business Manager H. L. Mills, offering to grant the usual tax discount of 2½ per cent to citizens paying school taxes between July 1 and September 15.

♦ Bartlesville, Okla. The city has approved an ordinance providing for a seventh member of the board of education, to be nominated and elected at large. The ordinance was passed as a result of a deadlock by a six-member board in the selection of a president. Members of the board, elected for four-year terms, are N. P. Skavlen, Grant L. Phillips, Frank S. Neptune, Ross M. Stuntz, and Mrs. Garnet Morris. The other members are Claude H. Burt and Mrs. Eula Morgan.

♦ Ottumwa, Iowa. The board of education has made arrangements with a syndicate of bonding houses for refinancing \$375,000 worth of the school district's bonded debt. The new bonds at 2¼ per cent will mature serially from 1940 to 1959 and the board will retire them at the rate of \$5,000 to \$30,000 annually.

After The Meeting

SUCCESS FORMULA

To the graduating class of the high school at Charleston, Mississippi, the Reverend J. Murray Taylor of Memphis spoke on the subject of "If You Would Succeed." He included in his remarks a formula for success so compact that some of the twenty-three boys and twenty-three girls to whom he particularly addressed his words will be bound to remember it. He said, as the *Mississippi Sun* recorded his talk:

"Stand up to be seen, speak up to be heard, and shut up to be appreciated."

Many a graduating class has listened to talks on how to succeed in life; many of those who listened have gone on to real success according to a variety of standards. Few graduation speakers, however, manage to put in a few words the importance of visibility, audibility, and silence.

An Old One Modified

It is always interesting to read a modern version of an ancient joke. This one is vouched for by *The Teachers World*.

Said the teacher in administering a time-honored thrashing to a boy, "This hurts me much more than it does you, my lad."

"Oh, does it?" cried the boy, "then I'll have six more, please."

New Editions

The initial cost of a series of textbooks, like geographies, is enormous, a publisher explains.

Yep, and the upkeep must be something fierce, too, since Der Fuehrer, Il Duce, and the Japs set in. — *Montreal Herald*.

Good Training

The examination was at hand and the student was very sure of himself.

Student: "I am sure to pass. I have been preparing the whole winter."

Friend: "Studying hard?"

Student: "No, playing bridge with the professor's wife." — *Die Woche im Bild*.

After the Battle

Gordon came home from school with his clothes torn, his lips swollen and one eye practically closed.

Mother: "Heavens! Did you walk home in that state?"

Gordon: "Yes, mother. There wasn't room for two in the ambulance." — *Madras Merry Mag*.

Talked About

Principal: "There goes the most talked-of man in the school system."

Kindergartner: "Really. That's new to me. Who talks about him?"



Going Down

Teacher: Now, Robert, what are you doing — learning something?

Robert: No ma'am; I'm listening to you.

NOW!

SHOW 16 MM. MOTION PICTURES in the LARGEST School Auditorium



IS YOUR school auditorium so large that only 35 mm. film has given amply brilliant motion pictures? Then learn about the new Bell & Howell Filmoarc, which brings theater-type, high-intensity arc illumination to the projection of 16 mm. films, sound or silent. For with the Filmoarc all fire hazards are banished (all 16 mm. film is safety film), the widest selection of films is at your command, and proved Bell & Howell ease of operation and lasting dependability are brought to auditorium projection.

A single Filmoarc permits an uninterrupted 45-minute program. A twin installation permits uninterrupted presentations of any length. The two speakers provide perfect sound distribution. A microphone may be used, for public address purposes, and a phonograph turntable for amplified musical programs. Mail coupon for details.

There are other Bell & Howell Projectors to meet every school need. 16 mm. Filmosound Projectors from \$276; silent, from \$139.

GET NEW FILM CATALOG describing more than 1000 sound films selected and especially edited for school use. Free to owners of 16 mm. sound projectors; otherwise, 25c. Silent film list free. Bell & Howell Company, Chicago; New York; Hollywood; London. Established 1907.

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Please send details about: ☐ Filmoarc;
☐ Smaller sound film projectors;
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We now have _____ of _____
☐ 16 mm. sound (number) (make)
☐ 16 mm. silent projectors.

☐ Kindly include catalog of new films available from Filmosound Library.

Name _____
School _____
Address _____
City _____ State _____

PRECISION-MADE BY
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School Buyers' News

NEW PRODUCTS

New Water Color Box

The American Crayon Company has announced that the new "Prang" Ovl 8 water color box is a beautiful example of modern designing.

The box contains five depressions providing mixing pans. The box itself can be used for a water pan or for an added mixing pan for large areas. A brush rest keeps the brush from the bottom of the pan. The tray can be fitted on to the front wall of the box and pushed down securely by means of a nib-locking arrangement at the back of the tray.

The new "Prang" water color box is manufactured by the AMERICAN CRAYON COMPANY, SANDUSKY, OHIO.

Foot Traffic Roofing

The Celotex Corporation has announced a new material for covering flat roofs, which are used for recreational purposes. The Traffic Top Celotex is a resilient, nonslipping material that is fully waterproof. It has been applied successfully to concrete areas around swimming pools, tennis courts, handball and badminton courts, and school roof playgrounds.

Specifications and prices are available from the CELOTEX CORPORATION, 919 N. MICHIGAN AVE., CHICAGO, ILL.



Say-When Ink Dispenser

Announce New, Modern Ink Dispenser

THE SQUIRES INKWELL COMPANY, PITTSBURGH, PA., has announced the "Say-when" ink dispenser, a new, modern way to distribute ink. No bothersome pouring is necessary, simply a touch of the finger tip. It is indispensable where speed and cleanliness are necessary.

The dispenser is small, compact, convenient, and easy to use. Complete information is available.

Film Preservative Treatment

Bell & Howell have announced a new Peerless Vaporate film treatment, available from the firm's Chicago and Hollywood laboratories. This process is intended to prevent scratches, to lubricate the emulsion to prevent it from adhering to the projector, and to impregnate the gelatine with a fixed chemical which makes the pliability indefinite and cannot be dissipated by the heat of the lamp.

Information is available from BELL & HOWELL, 1801 LARCHMONT AVE., CHICAGO, ILL.

Pupil's Metal Classroom Tables

The Royal Metal Manufacturing Company has announced a metal table for four students use. It is furnished in five heights from 20 to 29 inches, and in various sizes of tops, to fit the needs of kindergartens to upper classrooms. The tops are tempered masonite, and the two rigid standards and other metal parts are taupe enamel, oven baked.



Royal School Table, L-40

Complete illustrated circulars and prices of this table L-40 are available from the ROYAL METAL MANUFACTURING CO., 1138 SOUTH MICHIGAN AVE., CHICAGO, ILL.

RCA Announces Electric Carillons

Two new electric carillons—one an instrument of 26 notes, and the other a 5-note Westminster chime—have been announced by RCA Mfg. Company, Camden, N. J.

Both instruments are supplied in modernistic cabinets and are adapted to school use. Circulars are available.

New Tucker Back Rest

The Tucker Duck and Rubber Company, Fort Smith, Ark., manufacturers of folding furniture and outdoor specialties, have announced a new folding back rest for stadiums and other outdoor uses.



New Tucker Back Rest

Built of durable hardwood, this rest is constructed with slats which give body weight for comfort. To prevent the rest from sliding off the seat, metal hooks hold it in position. When not in use, the hooks may be raised up out of the way. The back can be folded, is light in weight, and easily carried. It is finished in natural or colors. A sample will be sent to any school official upon request.

Skilsaw Introduces "Airmaster" Portable Blower

A new kind of portable electric blower, the Skilsaw "Airmaster," has just been developed by Skilsaw, Inc., Chicago, Ill., to fill a demand from users. The "Airmaster" is a two-speed blower, which combines the utility of both a high-speed and a low-speed blower in one all-purpose tool.

The "Airmaster" has a two-speed feature which makes the tool applicable for two kinds of cleaning jobs and saves the additional cost of a second blower. The increased air output extends the application of a portable blower to many uses not previously taken care of by the portable unit. The "Airmaster" develops a velocity of 20,500 and 26,000 lineal feet per minute, with a capacity of both 125 and 176½ cu. ft. per minute.

Complete information and prices are available upon request.

Hammond Electrical Novachord

A pianoless piano, developed by Laurens Hammond, inventor of the Hammond electric organ, operates without pipes or reeds. The keyboard, exactly like that of a piano, yields not only piano tones but harpsichord tones, and simulated effects of other instruments, such as trumpet, guitar, and violin. The name Novachord, given to this pianoless piano, suggests both the new acoustical principles used and the novelty and variety of its tonal phenomena. This mechanical mystery comes down to a group of twelve vacuum-tube oscillators, tuned to the twelve tones of the chromatic scale in the topmost octave. Lower octaves are produced by "divider" tubes. These "fundamental tones" of the entire scale are then modified in their tone color, at the will of the performer, by levers which pick out and emphasize the appropriate harmonics—tone



Hammond Electrical Novachord

color of different instruments being the product of different intensities of harmonics.

The Novachord imitates known instruments and produces sounds which have no equivalent on the conventional palette. It is manufactured in the two Chicago plants of the Hammond Instrument Company, 2915 N. Western Avenue, Chicago, Ill.

SCHOOL BUYERS' NEWS

Clyde W. Humphrey Joins Gregg Company

Mr. Clyde W. Humphrey, who has recently entered the employ of the Gregg Publishing Company as a member of its staff of southern representatives, was formerly head of the department of secretarial science, of the University of Tennessee.

Mr. Humphrey, who has been a teacher, principal, and high-school department head, holds degrees from Eastern Kentucky State Teachers' College, and the George Peabody College for Teachers. He has done graduate work at New York University and has acted as director of courses in business education at the Peabody College for Teachers.

Toxic and Nontoxic Chalks

A question has been raised recently in an alarming manner concerning the presence of lead in the air of classrooms in excess of the amount declared by the United States Public Health Service to be allowable from the health standpoint. The discussion has raised doubts in the minds of school authorities with regard to the possibility of a small toxic content in sight-saving chalks as a contributing factor to this situation. The wide discussion of the matter has led the American Crayon Company to prepare the following statement of fact:

"The manufacturer of today whose business has been built upon the tradition of fidelity to those it serves, never puts into the hands of the consumer an article which, according to his best judgment, would in any way endanger the health of the user. Such sincerity of purpose on the part of a manufacturer however, makes him eager to cooperate with the best judgment of scientists and researchers who are sincerely endeavoring to render a service by giving consideration to a matter which might in time become a potential hazard.

"Therefore The American Crayon Company, as soon as word was received that certain health authorities thought it desirable to see that any vestige of lead was eliminated from chalk crayons, immediately put the matter into the hands of its laboratories with instructions to check sources of raw materials with a view to giving the public the assurance of an absolutely nontoxic sight-saving crayon.

"This has been done. Hygieia Forsyte contains no toxic ingredient. Moreover, all other chalks and crayons in this Company's line are being subjected to the same tests and careful scrutiny.

"School administrators therefore need have no hesitancy in the use of American Crayon Company's chalks and crayons; and the makers of these Old Faithful Products (the pioneer crayon company of the world) are happy to have a part in helping to safeguard the health of the youth of our nation."

The AMERICAN CRAYON COMPANY, at its Sandusky, Ohio, office, has available for school authorities, a complete statement of the problem, together with sworn laboratory reports concerning its products. These are available to school authorities upon request.

Mr. Robertson Heads J. B. Ford Co.

Mr. C. B. Robertson, for the past ten years general manager of the J. B. Ford Company, manufacturers of Wyandotte products, has been elected president of the company and member of its board of directors.



Mr. C. B. Robertson
President, J. B. Ford Company,
Wyandotte, Michigan.

Mr. W. F. Torrey, who has been connected with the sales department during the past six years, has been made secretary-treasurer. He will also serve as a director.

Both officers are located at the firm's main plant in Wyandotte, Mich., where the widely used line of school cleaning and building maintenance materials are manufactured.

Marston Opens Branch

The O. B. MARSTON SUPPLY CO., dealers in school furniture, supplies, and equipment, have opened a branch at Albuquerque, N. M., in order to give better service to schools in the State of New Mexico. The home office will be continued at Phoenix, Ariz.

School-Made Films

Mr. Roy F. Scott, Assistant Educational Manager of BELL & HOWELL COMPANY, CHICAGO, is conducting a two weeks' summer course on the school production of films. The lectures, which will be held at Peabody College, Nashville, Tenn., will include information on the selection of materials, the preparation of script, editing, and use of films.

MANUFACTURERS' PUBLICATIONS

Group Washing Catalog

The Bradley Washfountain Company has issued a supplement to its Catalog No. 937, illustrating and describing new types of washfountains, washfountain spray heads, soap dispensers, and group showers.

Copies are available from the BRADLEY WASHFOUNTAIN CO., Dept. SBJ, 2203 WEST MICHIGAN ST., MILWAUKEE, WIS.

Structural Insulation

The Celotex Corporation has issued a pamphlet, illustrating typical uses of Thermax structural insulating slabs. In school buildings the material is used as a fireproof sheathing for roofs and ceilings, for soundproof, nonbearing partitions, for ornamental corridor and room walls, and for

gymnasium and music-room ceilings. Full specifications are available from CELOTEX CORPORATION, 919 N. MICHIGAN AVE., CHICAGO, ILL.

"My Schoolbooks"

Hendrik Willem van Loon has endeared himself to Americans for his whimsical philosophy and his gentle wit, and in this extract from an "unpublished autobiography" he tells with happy humor the story of his first experiences with schools and with books. School-board members and superintendents who would enjoy a little literary *hors d'oeuvre* for fifteen minutes might write for a free copy to the FABRIKOID DIVISION of the E. I. DUPONT DE NEMOURS COMPANY, WILMINGTON, DELA.

PERSONAL NEWS OF SCHOOL OFFICIALS

• The school board of Lincoln, Nebr., has re-elected W. A. ROBBINS as president for a second term. MR. PAUL F. GOOD was named vice-president of the board.

• The school board of Fort Collins, Colo., has re-organized with the election of BYRON ALBERT as president; H. B. McCREARY as secretary; and H. N. BALES as treasurer.

• Mr. G. W. GROTT, of Hillsboro, Ill., has been elected superintendent of schools at Brownstown.

• SUPT. GEORGE D. HANN, of Ardmore, Okla., has been re-elected for a three-year term.

• MR. RANKIN ROBERTSON has been elected superintendent of schools at Santa Rosa, Tex.

• MR. MILLARD F. HALTER has been elected superintendent of schools at Wellston, Mo. He succeeds E. F. Bush.

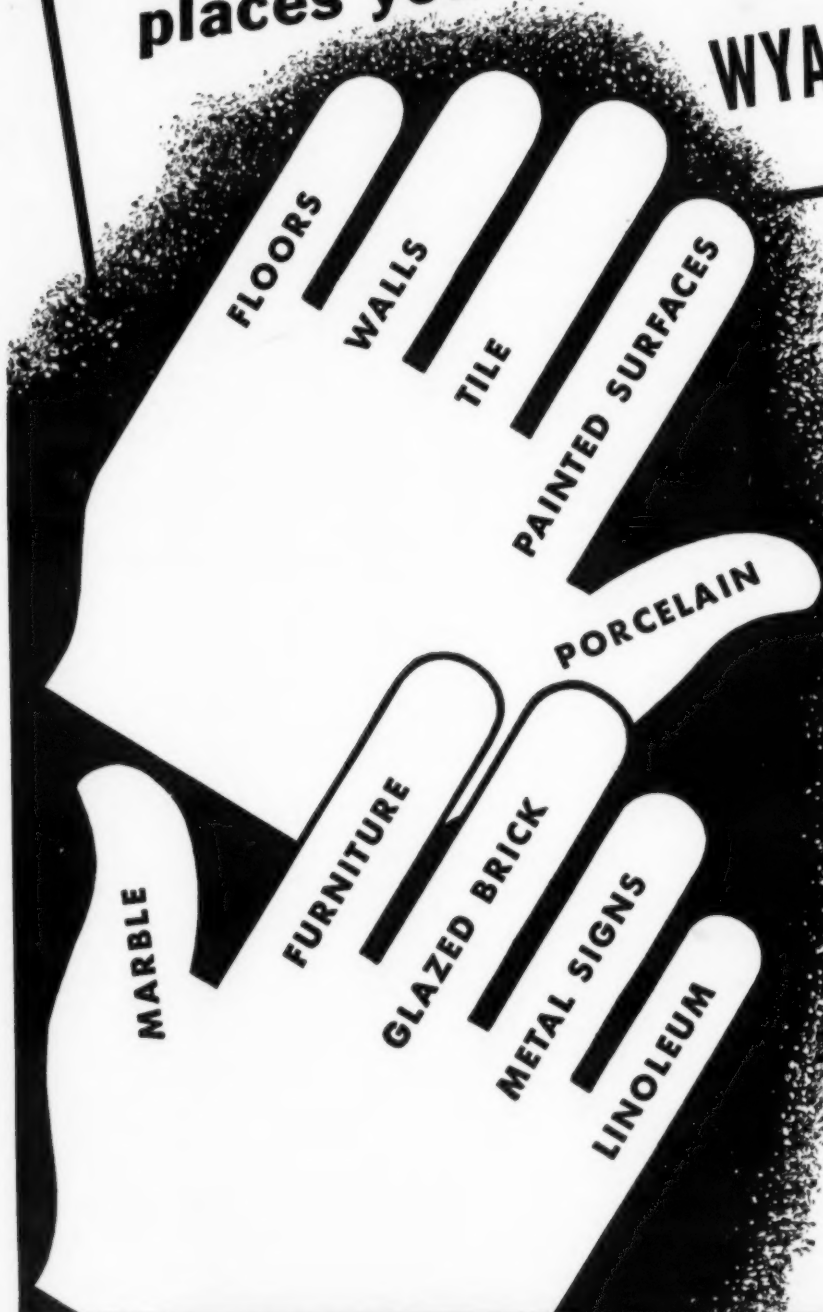
• MR. JOHN D. ALLEN has been appointed a member of the Chicago board of education, to fill a vacancy on the board. He was nominated for the post by the citizens' advisory schools committee, headed by Dean W. F. Clarke of DePaul University Law School.

• MR. JOHN W. BROOKER, State Director of School Buildings and Grounds for the Department of Education at Frankfort, Ky., has announced his candidacy for the Democratic nomination for Superintendent of Public Instruction in Kentucky. Mr. Brooker holds an M.A. degree from the University of Michigan and a B.S. degree from Georgetown College. He has been State Director of School Buildings since 1930, and is vice-president of the National Council on Schoolhouse Construction.

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SERVICE REPRESENTATIVES IN 88 CITIES

